

Laboratory	Central Quality Assurance Laboratory, ITC Life Sciences & Technology Centre, No. 3, 1st Main Road, Peenya Industrial Area, 1st Stage, Peenya, Bangalore, Karnataka		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	24.02.2016
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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I.	FOOD & AGRICULTURAL PRODUCTS			
1.	Bakery And Confectionery Products			
A.	Bakery Products			
a.	Biscuits	Moisture	IS 1011: 2002, DGHS Manual 3, Page. 35 (2005)	0.5 % to 10 %
		Total Ash	IS 1011: 2002, DGHS Manual 3, Page. 36 (2005)	0.1 % to 5 %
		Acid Insoluble Ash, In Dil HCl On Dry Basis	IS 1011: 2002, DGHS Manual 3, Page. 36 (2005)	0.001 % to 0.5 %
		Acidity Of Extracted Fat, As Oleic Acid	IS 1011: 2002, DGHS Manual 3, Page. 38 (2005)	0.1 % to 5.0 %
		Dietary Fibre (Oligosaccharide)	AOAC (19 th Edition) 991.43: 2012	1 % to 15 %
b.	Bread Thin Crust Pizza Base	Moisture	DGHS Manual 5, Page. 34 (2005)	5 % to 40.0 %
		Salt	DGHS Manual 5, Page. 10 (2005)	0.45 % to 0.85 %
		Water Activity At 25°C	AOAC (19 th Edition) 978.18: 2012	0.01 % to 1.0

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	Bread Thin Crust Pizza Base	Acid Insoluble Ash	DGHS Manual 3, Page. 36 (2005)	0.001 % to 0.2 %
		Alcoholic Acidity	DGHS Manual 3, Page. 20 (2005)	0.01 ml to 7.5 ml of 1N NaOH/100g
		Total Fat Content on Dry Basis	DGHS Manual 6, Page. 21 (2005)	5 % to 20.0 %
c.	Frozen Tortilla Wrap	Moisture	DGHS Manual 5, Page. 34 (2005)	15.0 % to 35.0 %
		pH (10 % Solution)	DGHS Manual 5, Page. 12 (2005)	5.0 to 8.0
		Salt	DGHS Manual 5, Page. 10 (2005)	0.5 % to 2.0 %
		Water Activity, At 25 °C	AOAC (19 th Edition) 978.18: 2012	0.01 % to 1.0
		Fat Content	DGHS Manual 6, Page. 21 (2005)	5.0 % to 10.0 %
d.	Cakes	Moisture	IS 1011: 2002, DGHS Manual 3, Page. 35 (2005)	5 % to 15 %
		Total Ash	IS 1011: 2002, DGHS Manual 3, Page. 36 (2005)	0.1 % to 5 %

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	Cakes	Acid Insoluble Ash, In Dil HCl on Dry Basis	IS 1011: 2002, DGHS Manual 3, Page. 36 (2005)	0.01 % to 0.5 %
		Acidity of Extracted Fat, as Oleic Acid	IS 1011: 2002, DGHS Manual 3, Page. 38 (2005)	0.1 % to 5.0 %
		Water Activity	AOAC (19 th Edition) 978.18: 2012	0.1 % to 1.0
		Dietary Fibre (Oligosaccharide)	AOAC (19 th Edition) 991.43: 2012	1 % to 15 %
e.	Biscuits, Bread Thin Crust Pizza Base, Frozen Tortilla Wrap, Cakes	Saturated Fatty Acid	CQAL/INST/STP-07 AOAC (19 th Edition) 996.06: 2012	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Mono Unsaturated Fatty Acid	Issue. 04, Dated. 20-08-2014	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Poly Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Total Trans Fatty Acid	CQAL/INST/STP-07 AOAC (19 th Edition) 996.06: 2012 Issue. 04, Dated. 20-08-2014	0.003 to 20.0 g/100g LOD: 0.01 g/100g
		Cholesterol	CQAL/INST/STP-24 AOAC (19 th Edition) 994.10: 2012 Issue. 03, Dated. 20-08-2014	0.001 g/100g to 1.0 g/100g LOD: 0.0003 g/100g

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	Biscuits, Bread Thin Crust Pizza Base, Frozen Tortilla Wrap, Cakes	Sodium	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 03, Dated. 20-08-2014	0.5 mg/kg to 50000 mg/kg LOD: 0.1 mg/kg
		Calcium	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 03, Dated. 20-08-2014	0.5 mg/kg to 20000 mg/kg LOD: 0.1 mg/kg
		Iron	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 03, Dated. 20-08-2014	0.5 mg/kg to 20000 mg/kg LOD: 0.1 mg/kg
		Zinc	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	1 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Copper	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	1 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Potassium	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.5 mg/kg to 20000 mg/kg LOD: 0.1 mg/kg
		Magnesium		0.5 mg/kg to 20000 mg/kg LOD: 0.1 mg/kg

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	Biscuits, Bread Thin Crust Pizza Base, Frozen Tortilla Wrap, Cakes	Phosphorus	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.5 mg/kg to 20000 mg/kg LOD: 0.1 mg/kg
		Vitamin A	CQAL/INST/STP-54 Issue. 04, Dated. 20-08-2014	50 µg/kg to 50000 µg/kg LOD: 20 µg/kg
		Vitamin C	CQAL/INST/STP-52 Issue. 04, Dated. 20-08-2014	5 mg/kg to 5000 mg/kg LOD: 2 mg/kg
		Sugar Profile		
		Fructose	CQAL/INST/STP-03 In house Method Issue. 04, Dated. 20-08-2014	0.5 g/100g to 100 g/100g LOD: 0.03 g/100g
		Glucose		
		Sucrose		
		Maltose		
		Lactose		
		Total Fat	IS 12711: 1989	10 % to 30 %
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	55 % to 80 %
		Total Sugars	DGHS Manual 1 Page. 2 (2005)	15 % to 40 %
		Total Protein (N x 6.25)	AOAC (19 th Edition) 984.13: 2012	1 % to 20 %

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	Biscuits, Bread Thin Crust Pizza Base, Frozen Tortilla Wrap, Cakes	Calories From Fat	FAO Food and Nutrition Paper 77, (2003)	100 kcal to 250 kcal
		Calories	FAO Food and Nutrition Paper 77, (2003)	350 kcal to 600 kcal
B.	Confectionery Products			
a.	Hard Boiled Confectionery, Toffees, Lozenges	Moisture Content By Karl Fischer	IS 2362: 1993	1 % to 10 %
		Sulphated Ash	DGHS Manual 4, Page. 54 (2005), IS 6287: 1985	0.1 % to 5 %
		Sulphated Ash on Salt as NaCl Free Basis	DGHS Manual 4, Page. 54 (2005), IS 6287: 1985	0.1 % to 5 %
		Acid Insoluble Ash, In Dil HCl	DGHS Manual 4, Page. 55 (2005), IS 6287: 1985	0.01 % to 2.0 %
		Fat Content On Dry Basis	DGHS Manual 4, Page. 68 (2005), IS 1163: 1971	2 % to 20 %
		Total Reducing Sugar	IS 6287: 1985	5 % to 50 %
		Sulphur Dioxide Content	IS 4706 (Part 2): 1978	1 mg/kg to 250 mg/kg
		FFA As Oleic Acid Of Extracted Fat	IS 548 (Part 1): 1964	0.1 % to 5 %
		Acidity As Citric, Malic, Tartaric And Lactic Acid	DGHS Manual 4, Page. 35 (2005)	0.1 % to 2.5 %

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b.	Fruit Bar - Jellicious	Brix	DGHS Manual 5, Page. 50 (2005)	70 % to 90 %
		Reducing Sugar	IS 6287: 1985	5 % to 20 %
		Moisture	DGHS Manual 5, Page. 37 (2005)	15 % to 25 %
c.	Chewing Gum	Loss On Drying	DGHS Manual 4, Page. 63 (2005)	1 % to 5 %
		Sucrose	DGHS Manual 4, Page. 62 (2005)	10 % to 70 %
		Gum Content	DGHS Manual 4, Page. 66 (2005)	2 % to 70 %
d.	Modified Toffees-Ecliars, Cofitino, Toffee Chew	Calories	FAO Food and Nutrition Paper 77, (2003)	400 kcal to 450 kcal
		Calories From Fat	FAO Food and Nutrition Paper 77, (2003)	90 kcal to 100 kcal
		Total Fat	IS 1163: 1992	1 g/100g to 15 g/100g
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	70 g/100g to 90 g/100g
		Total Sugars	IS 6287: 1985	50 g/100g to 80 g/100g
		Total Protein (N x 6.25)	IS 6287: 1985	1 g/100g to 5 g/100g

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e.	Hard Boiled Confectionery, Chewing Gum, Fruit Bar, Lozenges	Moisture	IS 6287: 1985	5 g/100g to 10 g/100g
		Total Ash	IS 6287: 1985	0.5 g/100g to 2 g/100g
		Calories	FAO Food and Nutrition Paper 77, (2003)	300 kcal to 400 kcal
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	70 g/100g to 100 g/100g
		Total Sugars	IS 6287: 1985	50 g/100g to 80 g/100g
		Moisture	IS 6287: 1985	0.5 g/100g to 25 g/100g
		Total Ash	IS 6287: 1985	0.01 g/100g to 8 g/100g
f.	Sugar Free Lozenges	Calories	FAO Food and Nutrition Paper 77, (2003)	375 kcal to 450 kcal
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	90 g/100g to 100 g/100g
		Moisture	IS 6287: 1985	0.1 g/100g to 2 g/100g
		Total Ash	IS 6287: 1985	0.01 g/100g to 1 g/100g
g.	Hard Boiled Confectionery, Toffees, Lozenges, Jellicious, Chewing Gum	Saturated Fatty Acid	CQAL/INST/STP-07 AOAC (19 th Edition) 996.06: 2012	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Mono Unsaturated Fatty Acid	Issue. 03, Dated. 20-08-2014	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Poly Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g

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	Hard Boiled Confectionery, Toffees, Lozenges, Jellicious, Chewing Gum	Total Trans Fatty Acid	CQAL/INST/STP-07 AOAC (19 th Edition) 996.06: 2012 Issue. 03, Dated. 20-08-2014	0.03 g/100g to 20.0 g/100g LOD: 0.01 g/100g
		Cholesterol	CQAL/INST/STP-24 AOAC (19 th Edition) 994.10: 2012 Issue. 03, Dated. 20-08-2014	0.001 g/100g to 1.0 g/100g LOD: 0.001 g/100g
		Sugar Profile		
		Fructose	CQAL/INST/STP-03 Issue. 04, Dated. 20-08-2014	0.3 g/100g to 100 g/100g LOD: 0.1 g/100g
		Glucose		
		Sucrose		
		Maltose		
		Lactose		
		Texture – Hardness – Chewy Candy	CQAL/INST/STP-49 Issue. 04, Dated. 20-08-2014	70 N to 150 N LOD: 30 N
2.	Canned & Processed Foods			
A.	Convenience Foods			
a.	Potato Chips Namkeens	Moisture Content	IS 12575: 2010	0.3 % to 5.0 %
		Salt as NaCl	IS 1797: 1985	1.0 % to 5.0 %
		Fat Content	IS 12575: 2010	20 % to 40 %

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	Potato Chips Namkeens	Acidity Of Extracted Fat	IS 548 (Part 1): 1964	0.05 % to 1 %
		Peroxide Value Of Extracted Fat	IS 548 (Part 1): 1964	1 meq/kg to 10 meq/kg
		p-Anisidine Value of Extracted Fat	AOCS Cd 18-90 (6 th Edition): 2010	1 to 25
		Total Ash	IS 12575: 2010	0.1 % to 5 %
		Acid Insoluble Ash, on Dry Basis	IS 12575: 2010	0.01 % to 0.15 %
		Protein (Nx6.25)	IS 7219: 1973	1.0 % to 25.0 %
		Carbohydrates	FAO Food and Nutrition Paper 77 (2003)	0.1 % to 90.0 %
		Energy	FAO Food and Nutrition Paper 77 (2003)	(50.0 kcal to 900 kcal)/100g
		Saturated Fatty Acid	CQAL/INST/STP-36 AOAC (19 th Edition) 996.06: 2012 Issue. 04, Dated. 20-08-2014	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Mono Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Poly Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Total Trans Fatty Acid		0.03 g/100g to 20.0 g/100g LOD: 0.01 g/100g

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	Potato Chips Namkeens	Cholesterol	CQAL/INST/STP-24 AOAC (19 th Edition) 994.10: 2012 Issue. 04, Dated. 20-08-2014	0.001 g/100g to 1.0 g/100g LOD: 0.0003 g/100g
		Sodium	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.5 mg/kg to 50000 mg/kg LOD: 0.1 mg/kg
		Calcium		
		Iron		
		Potassium		
		Magnesium		
		Phosphorus		
		Zinc		1.0 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Copper		0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Vitamin A	CQAL/INST/STP-54 Issue. 04, Dated. 20-08-2014	50 µg/kg to 50000 µg/kg LOD: 20 µg/kg
		Vitamin E		2 mg/kg to 500 mg/kg LOD: 0.5 mg/kg
		Vitamin B1 (Thiamin)	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	2 mg/kg to 500 mg/kg LOD: 0.5 mg/kg
		Vitamin B2 (Riboflavin)	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	1 mg/kg to 500 mg/kg LOD: 0.5 mg/kg

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	Potato Chips	Vitamin B3 (Niacin)	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	1 mg/kg to 500 mg/kg LOD: 0.5 mg/kg
	Namkeens	Vitamin B9 (Folic Acid)		1 mg/kg to 500 mg/kg LOD: 0.5 mg/kg
		Sugar Profile		
		Fructose	CQAL/INST/STP-03 Issue. 04, Dated. 20-08-2014	0.5 g/100g to 100 g/100g LOD: 0.03 g/100g
		Glucose		
		Sucrose		
		Maltose		
		Lactose		
		Texture – Hardness (Potato Chips & Mad Angles)	CQAL/INST/STP-50 Issue. 01, Dated. 14-07-2014	250 g to 1800 g LOD: 30 g
B.	Instant Mixes			
a.	Gulab Jamun Mix	Moisture	IS 2234: 1989	5 % to 15 %
	Rice Dosa Mix	Dirt & Extraneous Matter	IS 2234: 1989	0.01 % to 10 %
	Rice Idli Mix	Bulk Density	IS 16033: 2012	0.5 g/cc to 2.0 g/cc
	Rava Idli Mix	Titrateable Acidity	AOAC (19 th Edition) 935.57: 2012	0.1 % to 2.0 %

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	Gulab Jamun Mix	Salt As NaCl	DGHS Manual 5 Page. 10 (2005)	0.5 % to 4.0 %
	Rice Dosa Mix	pH	IS 15557: 2005	1.0 to 14
	Rice Idli Mix	Leavening Index	IS 2234: 1989	0.2 % to 3.0 %
	Rava Idli Mix	Total Ash	IS 2234: 1989	1.5% to 5.0 %
		Acid Insoluble Ash	IS 2234: 1989	0.01% to 0.5 %
		Protein	IS 7219: 1973	0.1 % to 70.0
		Total Fat	DGHS Manual 6, Page. 39 (2005)	0.1 % to 99.9
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	0.1 % to 90.0
		Energy	FAO Food and Nutrition Paper 77, (2003)	50.0 kcal/100g to 900 kcal/100g
		Total Sugars	DGHS Manual 5 Page. 15 (2005)	0.01 % to 80.0 %
		Benzoic Acid	CQAL/INST/STP-16 Issue. 04, Dated. 20-08-2014	3.0 mg/kg to 2000 mg/kg LOD: 1 mg/kg
		Sorbic Acid		3.0 mg/kg to 2000 mg/kg LOD: 1 mg/kg

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	Gulab Jamun Mix	Sugar Profile		
	Rice Dosa Mix	Fructose	CQAL/INST/STP-03 Issue. 04, Dated. 20-08-2014	0.5 g/100g to 100 g/100g LOD: 0.03 g/100g
	Rice Idli Mix	Glucose		
	Rava Idli Mix	Sucrose		
		Maltose		
		Lactose		
C.	Ready To Eat Meals, Frozen Ready To Eat Meals	Moisture	DGHS Manual 5 Page. 34 (2005)	10 % to 90 %
		Total Soluble Solids (Degree Brix)	IS 5861: 1993	1 % to 20 %
		Titratable Acidity	DGHS Manual 5 Page. 12 (2005), IS 11765: 1996	0.1 % to 1.0 %
		Salt As NaCl	DGHS Manual 5 Page. 10 (2005)	0.2 % to 3.0 %
		pH	DGHS Manual 5 Page. 12 (2005)	1.0 to 14
D.	Ready To Eat Meals, Frozen Ready To Eat Meals, Tomato Ketchup, Jams & Marmalades, Halwas, Ginger Masala, Garlic Masala, Red	Saturated Fatty Acids	CQAL/INST/STP-07 AOAC (19 th Edition) 996.06: 2012 Issue. 04, Dated. 20-08-2014	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Mono Unsaturated Fatty Acids		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Poly Unsaturated Fatty Acids		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g

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	Chilli Masala, Chutneys, Conserves, Dehydrated Vegetables, Dehydrated White Onion, Toasted Minced, Dehydrated Garlis Minced, Fruit Powders, Mango Pulp, Tomato Paste, Parsley, Tomato Powder, Beet Juice Powder, Coconut Milk Powder, Desiccated Coconut Powder	Total Trans Fatty Acid	CQAL/INST/STP-36 AOAC (19 th Edition) 996.06: 2012 Issue. 04, Dated. 20-08-2014	0.03 g/100g to 20 g/100g LOD: 0.01 g/100g
		Cholesterol	CQAL/INST/STP-24 AOAC (19 th Edition) 994.10: 2012 Issue. 04, Dated. 20-08-2014	0.001 g/100g to 1.0 g/100g LOD: 0.0003 g/100g
3.	Jams, Juices, Sauces & Concentrates			
A.	Tomato Ketchup	Total Soluble Solids	IS 5861: 1993	10 % to 60 %
		Titratable Acidity	IS 13844: 2003	0.1 % to 2.5 %
		Salt As NaCl	DGHS Manual 5 Page. 10 (2005)	0.2 % to 4.0 %
		pH	DGHS Manual 5 Page. 12 (2005)	1.0 to 14

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B.	Jams & Marmalades	Total Soluble Solids	IS 5861: 1993	50 % to 75 %
		Titrateable Acidity	IS 13844: 2003	0.1 % to 1.0 %
		pH	DGHS Manual 5 Page. 12 (2005)	1.0 to 14
		Moisture	DGHS Manual 5 Page. 34 (2005)	10 % to 25 %
C.	Halwas	Total Soluble Solids (Degree Brix)	IS 5861: 1993	40 % to 75 %
		Titrateable Acidity	IS 13844: 2003	0.1 % to 1.0 %
		pH	DGHS Manual 5 Page. 12 (2005)	1.0 to 14
		Water Activity	AOAC (19 th Edition) 978.18: 2012	0.1 % to 1.0
D.	Ginger Masala, Garlic Masala, Red Chili Masala	Total Soluble Solids	IS 5861: 1993	2 % to 50 %
		Titrateable Acidity	IS 13844: 2003	0.1 % to 2.5 %
		Salt As NaCl	DGHS Manual 5 Page. 10 (2005)	0.2 % to 4.0 %
		pH	DGHS Manual 5 Page. 12 (2005)	1.0 to 14
E.	Chutneys	Total Soluble Solid	IS 5861: 1993	10 % to 90 %
		Titrateable Acidity	IS 13844: 2003	0.1 % to 2.0 %

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F.	Chutneys	Salt As NaCl	DGHS Manual 5 Page. 10 (2005)	0.2 % to 3.0 %
		pH	DGHS Manual 5 Page. 12 (2005)	1.0 to 14
		Water Activity	AOAC (19 th Edition) 978.18: 2012	0.1 % to 1.0
		Total Ash (On Dry Basis)	IS 3500: 2001	1.0 % to 5.0 %
		Acid Insoluble Ash	IS 3500: 2001	0.01 % to 0.5
	Conserves	Total Soluble Solids	IS 5861: 1993	45 % to 75 %
		Titratable Acidity	IS 13844: 2003	0.1 % to 1.5 %
		Salt As NaCl	DGHS Manual 5 Page. 10 (2005)	0.1 % to 1.0 %
		pH	DGHS Manual 5 Page. 12 (2005)	1.0 to 14
		Water Activity	AOAC (19 th Edition) 978.18: 2012	0.1 % to 1.0
4.	Vegetables & Vegetable Products			
A.	Dehydrated Vegetables	Moisture	DGHS Manual 5 Page. 51 (2005), IS 4627: 1968	1.0 % to 8.0 %
		Total Ash	DGHS Manual 5 Page. 51 (2005)	0.1 % to 10 %

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	Dehydrated Vegetables	Acid Insoluble Ash	DGHS Manual 5 Page. 51 (2005)	0.01 % to 0.5 %
		Peroxidase Test	DGHS Manual 5 Page. 51 (2005)	Qualitative
		Rehydration Ratio	DGHS Manual 5 Page. 51 (2005)	1 to 10.0
		Sulphur Dioxide	DGHS Manual 5 Page. 52 (2005), AOAC (19 th Edition) 990.28: 2012	20 mg/kg to 200 mg/kg
		Salt As NaCl	DGHS Manual 5 Page. 10 (2005)	1 % to 10 %
		Bulk Density	IS 16033: 2012	0.1 g/cc to 1.0 g/cc
		Particle Size (L)	ITC-FBD/AOP/RTE/FG-12/06 Issue. 02, Dated. 20-10-2014	1 mm to 20 mm
		Particle Size (W)	ITC-FBD/AOP/RTE/FG-12/06 Issue. 02, Dated. 20-10-2014	1 mm to 10 mm
B.	Dehydrated White Onion Toasted Minced	Extraneous Matter	IS 1797: 1985	0.001 % to 10 %
		Moisture	IS 1797: 1985	0.001 % to 10 %
		Total Ash On Dry Basis	IS 1797: 1985	0.1 % to 10 %
		Acid Insoluble Ash On Dry Basis	IS 1797: 1985	0.01 % to 2 %

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
C.	Dehydrated White Onion Toasted Minced	Test For Presence of Peroxidase	DGHS Manual 5 Page. 51 (2005)	Qualitative
		Rehydration Ratio	DGHS Manual 5 Page. 51 (2005)	0.1 % to 10.0
		Sulphur Dioxide	IS 4627: 1968	20 mg/kg to 200 mg/kg
		Bulk Density	ITC-FBD/AOP/ST/RM-29/11 Issue. 01, Dated. 22-11-2013	0.1 g/cc to 1.0 g/cc
		Crude Fibre on Dry Basis	IS 1797: 1985	0.1 % to 30.0 %
	Dehydrated Garlic Minced	Extraneous Matter	IS 1797: 1985	0.001 % to 10 %
		Moisture	IS 1797: 1985	0.001 % to 10 %
		Total Ash Db	IS 1797: 1985	0.1 % to 10 %
		Acid Insoluble Ash On Dry Basis	IS 1797: 1985	0.01 % to 2 %
		Test For Presence Of Peroxidase	DGHS Manual 5 Page. 51 (2005)	Qualitative
		Rehydration Ratio	DGHS Manual 5 Page. 51 (2005)	1 to 5.0
		Sulphur Dioxide	IS 4627: 1968	20 mg/kg to 200 mg/kg
		Bulk Density	ITC-FBD/AOP/ST/RM-30/11 Issue. 01, Dated. 22-11-2013	0.1 g/cc to 1.0 g/cc

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5.	Fruit & Fruit Products			
A.	Fruit Powders	Acidity As Citric Acid	IS 3883: 1993, DGHS Manual 5 Page. 12 (2005)	0.1 % to 10 %
		Dextrose Equivalent (DE)	AOAC (19 th Edition) 923.09: 2012, DGHS Manual 5 Page. 16 (2005)	10 % to 50 %
		Moisture	DGHS Manual 5 Page. 34 (2005)	1 % to 5 %
		pH of 1 % Solution	DGHS Manual 5 Page. 12 (2005)	1 to 14
		Bulk Density	ITC-FBD/AOP/RTE/FG-12/02 Issue. 02, Dated. 28-06-2013	0.1 g/cc to 1.0 g/cc
B.	Mango Pulp	Colour	ITC-FBD/AOP/SENSORY-08 Issue. 01 Dated. 23-09-2015, ASTM E2139-05: 2011	Qualitative
		Total Soluble Solids	DGHS Manual 5 Page. 50 (2005)	10 % to 40 %
		Acidity	DGHS Manual 5 Page. 12 (2005)	0.1 % to 1.5 %
		pH	DGHS Manual 5 Page. 12 (2005)	1 to 14

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C.	Parsley	Moisture Content	DGHS Manual 5 Page. 34 (2005)	1 % to 15 %
D.	Tomato Powder	Moisture Content	IS 2362: 1993	0.01 % to 10 %
		Acidity As Citric Acid	IS 3883: 1993, DGHS Manual 5 Page. 12 (2005)	0.01 % to 10 %
E.	Beet Juice Powder	Moisture Content	IS 2362: 1993	% to 10 %
F.	Tomato Paste	Total Soluble Solids	IS 3883: 1993, DGHS Manual 5 Page. 50 (2005)	20 ° to 40 °
		Acidity As Anhydrous Citric Acid	IS 3883: 1993, DGHS Manual 5 Page. 12 (2005)	0.1 % to 3 %
		Salt As NaCl	IS 3883: 1993, DGHS Manual 5 Page. 10 (2005)	0.1 % to 1.0 %
		pH	IS 3883: 1993, DGHS Manual 5 Page. 12 (2005)	1.0 to 14
		Colour Value L,a,b	IS 3883: 1993	2 to 30.0
G.	Coconut Milk Powder	Moisture & Volatile Matter	IS 966: 1999	0.5 % to 5.0 %
		Free Oil	IS 966: 1999	20 % to 60 %

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	Coconut Milk Powder	Free Fatty Acid As Lauric Acid	IS 966: 1999	0.01 % to 0.5 %
		Peroxide Value	IS 548 (Part 1): 1964	0.1 meq/kg to 5 meq/kg
		Total Ash On Dry Basis	IS 966: 1999	0.1 % to 5.0 %
		pH of 10 % Aqueous Solution	IS 15557: 2005	1.0 % to 14.0
H.	Desiccated Coconut Powder	Extraneous Vegetable Matter	IS 1797: 1985, DGHS Manual 5 Page. 50 (2005)	0.1 % to 50 %
		Moisture	IS 966: 1999	0.5 % to 10.0 %
		Free Oil	IS 966: 1999	35 % to 75 %
		Acidity Of Extracted Fat, As Lauric Acid	IS 966: 1999	0.05 % to 1.0 %
		Total Ash On Dry Basis	IS 966: 1999	0.1 % to 5.0 %
		Sulphur-Di-Oxide	IS 4706 (Part 2):1978	5 mg/l to 100 mg/l
6.	Cereals, Pulses & Cereal Products			
A.	Maida	Moisture	DGHS Manual 3, Page. 17 (2005), IS 1009: 1979	1.0 % to 20.0 %
		Total Ash , Dry Basis	DGHS Manual 3, Page. 17-18 (2005), IS 1009: 1979	0.05 % to 3.0 %
		Acid Insoluble Ash In Dil HCl, Dry Basis	DGHS Manual 3, Page. 18-19 (2005), IS 1009: 1979	0.01 % to 2 %

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B.	Maida	Gluten Content, Dry Basis	DGHS Manual 3, Page. 19-20 (2005), IS 1009: 1979, AACC (10 th Edition) 38-12	1.0 % to 15.0 %
		Alcoholic Acidity With 90 % Alcohol As H ₂ SO ₄ , (On Dry Basis)	DGHS Manual 3, Page. 20 (2005), IS 1009: 1979	0.01 % to 1.0 %
		Sedimentation Value	IS 13864: 1993	10.0 ml to 35.0 ml
		Pekar Colour Test	AACC (10 th Edition) 14-10	Qualitative
	Wheat Fibre	Moisture	IS 1011: 2002	0.01 % to 15.0 %
		Total Ash On Dry Basis	IS 1009: 1979	0.01 % to 10 %
		pH Of 10 % Solution	IS 4706: 1978	1.0 to 14.0
		Nitrogen Content	IS 7219: 1973	0.5 % to 5 %
		Total Dietary Fibre	AOAC (19 th Edition) 985.29: 2012	80 % to 100 %
		Particle Size >32 Micron	ITC-FBD/AOP/BS/RM-57/04 Issue. 04 Issue Dated. 9-08-2014	10.0 % to 100.0 %
		Particle Size >100 Micron	ITC-FBD/AOP/BS/RM-57/04 Issue. 04 Issue Dated. 9-08-2014	0.01 % to 15 %
C.	White Oats	Taste & Smell	IS 1484: 1975	Qualitative
		Moisture	IS 1155: 1968	5.0 % to 15.0 %

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D.	White Oats	Total Ash	IS 1155: 1968	0.1 % to 5.0 %
		Acid Insoluble Acid On Dry Basis	IS 1155: 1968	0.01 % to 2.0 %
		Alcoholic Acidity, ml of 1 N NaOH/100g On Dry Basis	IS 1155: 1968	0.5 ml to 15.0 ml
		Nitrogen on Dry Basis	IS 7219: 1973	1.0 % to 3.0 %
		Crude Fibre, On Dry Basis	DGHS Manual 3, Page. 24 (2005)	1.0 % to 30 %
	Whole Wheat Atta	Moisture	IS 1155: 1968, DGHS Manual 3, Page. 17 (2005)	6.0 % to 14.0 %
		Total Ash On Dry Basis	IS 1155: 1968, DGHS Manual 3, Page. 17 (2005)	1.0 % to 2.0 %
		Acid Insoluble Ash On Dry Basis	IS 1155: 1968, DGHS Manual 3, Page. 18 (2005)	0.005 % to 0.15 %
		Alcoholic Acidity On Dry Basis	IS 1155: 1968, DGHS Manual 3, Page. 20 (2005)	0.01 % to 0.2 %
		Gluten Content (By Hand Wash) On Dry Basis	IS 1155: 1968, DGHS Manual 3, Page. 19 (2005)	5 % to 13 %

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Whole Wheat Atta	Damage Starch On Dry Basis (Enzymatic)	AACC (10 th Edition) Method 76-31.01,	1.0 % to 30.0 %
		Granulation (Using 100 g of Flour & Sieving for 13 min by Lab Sifter)	ITC-FBD/AOP/ST/FG-01/07 Issue. 03 Dated. 8-11-2012	
		> 425μ		0.001 % to 5.0 %
		>315μ		0.1 % to 7.5 %
		>212μ		1.0 % to 25.0 %
		>150μ		9.0 % to 23.0 %
		>118μ		3.0 % to 17.0 %
		<118μ		40.0 % to 75.0 %
		Atta Colour -L	ITC-FBD/AOP/ST/FG-01/06 Issue. 03 Dated. 8-11-2012	80 units to 95 units
		Water Absorption %- By Farinograph	AACC (10 th Edition) Method. 54-21,	50 % to 90 %
		Dough Colour - L	ITC-FBD/AOP/ST/FG-01/15 Issue. 03 Dated. 8-11-2012	40 units to 80 units
		Carbon Tetra Chloride Test	AACC (10 th Edition) Method. 28-06 & 28-07,	Qualitative test
		Sedimentation Value	AACC (10 th Edition) Method. 56-70,	30 ml to 90 ml

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Whole Wheat Atta	Fat Content	AOAC (922.06)	0.1 % to 15 %
		Protein (N X 5.7)	DGHS Manual 3, Page. 22 (2005), IS 7219: 1973	1 % to 20 %
		Total Dietary Fibre	AOAC (19 th Edition) 985.29: 2012	6 % to 18 %
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	10 % to 95 %
		Energy	FAO Food and Nutrition Paper 77, (2003)	250 kcal/100g to 450 kcal/100g
		Total Sugars	CQAL/INST/STP-03 In house Method Issue. 04, Dated. 20-08-2014	0.01 % to 80.0 %
E.	Multigrain Atta	Moisture	IS 1155: 1968, DGHS Manual 3, Page. 17 (2005)	6.0 % to 14.0 %
		Total Ash DB	IS 1155: 1968, DGHS Manual 3, Page. 17 (2005)	1.0 % to 3.0 %
		Acid Insoluble Ash on Dry Basis	IS 1155: 1968, DGHS Manual 3, Page. 18 (2005)	0.005 % to 0.2 %
		Alcoholic Acidity on Dry Basis	IS 1155: 1968, DGHS Manual 3, Page. 20 (2005)	0.01 % to 0.2 %

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	Multigrain Atta	Granulation(Using 100 G Of Flour & Sieving For 13 Min By Lab Sifter)	ITC-FBD/AOP/ST/FG-11/05 Issue. 01 Dated. 8-11-2012	
		> 425µ		0.001 % to 5.0 %
		>315µ		0.1 % to 7.5 %
		>212µ		1.0 % to 25.0 %
		>150µ		9.0 % to 23.0 %
		>118µ		3.0 % to 17.0 %
		<118µ		40.0 % to 75.0 %
		Damage Starchon Dry Basis (Enzymatic)	AACC (10 th Edition) Method 76-31.01,	1.0 % to 30.0 %
		Protein (Nx6.25) on Dry Basis	DGHS Manual 3, Page. 22 (2005), IS 7219: 1973	12.0 % to 25.0 %
		Total Fat DB	IS 7836: 1975	1.00 % to 3.0 %
		Atta Colour - L	ITC-FBD/AOP/ST/FG-11/07 Issue. 01 Dated. 8-11-2012	80 unit to 95 unit
		Water Absorption %- By Farinograph	AACC (10 th Edition) Method. 54-21,	65 % to 90 %
		Dough Colour - L	ITC-FBD/AOP/ST/FG-11/07 Issue. 01 Dated. 8-11-2012	40 unit to 80 unit
		Carbon Tetra Chloride Test	AACC (10 th Edition) Method. 28-06 & 28-07	Qualitative test

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	Multigrain Atta	Total Dietary Fibre	AOAC (19 th Edition) 985.29: 2012	9 % to 18 %
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	10 % to 95 %
		Energy	FAO Food and Nutrition Paper 77, (2003)	(250 kcal to 450 kcal)/100g
		Total Sugars	CQAL/INST/STP-03 In house Method Issue. 04, Dated. 20-08-2014	0.1 % to 20.0 %
F.	Methi Atta	Moisture	IS 1155: 1968, DGHS Manual 3 Page. 17 (2005)	6.0 % to 14 %
		Alcoholic Acidity On Dry Basis	IS 1155: 1968, DGHS Manual 3, Page. 20 (2005)	0.01 % to 0.3 %
		Total Ash on Dry Basis	IS 1155: 1968, DGHS Manual 3 Page. 17 (2005)	1.0 % to 4.0 %
		Acid Insoluble Ash on Dry Basis	IS 1155: 1968, DGHS Manual 3 Page. 18 (2005)	0.01 % to 0.3 %

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	Methi Atta	Granulation(Using 100 G Of Flour & Sieving For 13 Min By Lab Sifter)	ITC-FBD/AOP/ST/FG-01/07 Issue. 03 Dated. 8-11-2012	
		> 425µ		0.1 % to 9.0 %
		>315µ		0.1 % to 9.0 %
		>212µ		2.0 % to 22.0 %
		>150µ		8.0 % to 22.0 %
		>118µ		3.0 % to 17.0 %
		<118µ		40.0 % to 75.0 %
		Damage Starch on Dry Basis	AACC (10 th Edition) Method 76-31.01,	10.0 % to 30.0 %
		Atta Colour – L	ITC-FBD/AOP/ST/FG-01/06 Issue. 03 Dated. 8-11-2012	78.0 unit to 90.0 unit
		Water Absorption % - By Farinigraph	AACC (10 th Edition) Method. 54-21,	65.0 % to 90.0 %
		Dough Colour – L	ITC-FBD/AOP/ST/FG-01/15 Issue. 03 Dated. 8-11-2012	40.0 unit to 80.0 unit
		Carbon Tetrachloride Test	AACC (10 th Edition) Method. 28-06 & 28-07	Qualitative test
G.	Wheat	Moisture	IS 1155: 1968	0.1 % to 14.0 %

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H.	Soya Flour	Moisture	IS 7836: 1975	1.0 % to 14 %
		Total Ash On Dry Basis	IS 7836: 1975	4 % to 10 %
		Acid Insoluble Ash on Dry Basis	IS 7836: 1975	0.01 % to 0.5 %
		Alcoholic Acidity on Dry Basis	IS 1155: 1968	0.01 % to 0.8 %
		Flour Colour - L	ITC-FBD/AOP/ST/RM-035/09 Issue. 01 Dated. 8-11-2012	60 unit to 95unit
		Protein (N x 6.25) On Dry Basis	IS 4684: 1975	40 % to 70 %
		Total Fat	IS 4684: 1975	0.1 % to 5.0 %
		Carbon Tetra Chloride Test	AACC (10 th Edition) Method. 28-06 & 28-07,	Qualitative
I.	Gram Flour	Moisture	IS 1009: 1979	1.0 % to 14 %
		Total Ash on Dry Basis	IS 1009: 1979	1.0 % to 6.0 %
		Acid Insoluble Ash on Dry Basis	IS 1009: 1979	0.01 % to 0.5 %
		Alcoholic Acidity on Dry Basis	IS 1009: 1979	0.01 % to 0.8 %
		Flour Colour -L Unit	ITC-FBD/AOP/ST/RM-038/09 Issue. 01 Dated. 8-11-2012	60 unit to 95unit
		Protein (N x 6.25) On Dry Basis	IS 4684: 1975 Appendix C	1.0 % to 40 %
		Total Fat	IS 7836: 1975	0.1 % to 10 %

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	Gram Flour	Carbon Tetra Chloride Test	AACC (10 th Edition) Method. 28-06 & 28-07	Qualitative
J.	Maize Flour	Moisture	IS 1155: 1968	0.1 % to 16.0 %
		Total Ash On Dry Basis	IS 1155: 1968	0.1 % to 3.0 %
		Acid Insoluble Ash on Dry Basis	IS 1155: 1968	0.01 % to 0.2 %
		Alcoholic Acidity on Dry Basis	IS 1155: 1968	0.01 % to 0.8 %
		Flour Colour -L	ITC-FBD/AOP/ST/RM-037/09 Issue. 01 Dated. 8-11-2012	60 unit to 95 unit
		Protein (Nx6.39) On Dry Basis	IS 7219: 1973	0.1 % to 20.0 %
		Total Fat	IS 7836: 1975	0.1 % to 5.0 %
		Carbon Tetra Chloride Test	AACC (10 th Edition) Method. 28-06 & 28-07	Qualitative
K.	Oat Flour	Moisture	IS 1155: 1968	0.1 % to 14.0 %
		Total Ash On Dry Basis	IS 1155: 1968	0.1 % to 3.0 %
		Acid Insoluble Ash On Dry Basis	IS 1155: 1968	0.01 % to 0.2 %
		Alcoholic Acidity On Dry Basis	IS 1155: 1968	0.01 % to 0.8 %
		Flour Colour -L	ITC-FBD/AOP/ST/RM-036/09 Issue. 01 Dated. 8-11-2012	60 unit to 95 unit

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	Oat Flour	Protein (Nx5.83) On Dry Basis	IS 7219: 1973	0.1 % to 15.0 %
		Total Fat	IS 7836: 1975	0.1 % to 10.0 %
		Carbon Tetra Chloride Test	AACC (10 th Edition) Method. 28-06 & 28-07	Qualitative
L.	Isabgol (Psyllium) Husk	Moisture	IS 1155: 1968, IS 13662: 1993	0.1 % to 14 %
		Total Ash on Dry Basis	IS 13662: 1993	0.1 % to 6.0 %
		Acid Insoluble Ash on Dry Basis	IS 13662: 1993	0.01 % to 0.6 %
		Alcoholic Acidity on Dry Basis	IS 13662: 1993	0.01 % to 0.8 %
		Flour Colour -L	ITC-FBD/AOP/ST/RM-039/09 Issue. 01 Dated. 8-11-2012	60 unit to 90 unit
		Carbon Tetra Chloride Test	AACC (10 th Edition) Method. 28-06 & 28-07	Qualitative
		Swelling Test	IS 13662: 1993	40 ml to 100 ml
M.	Base Noodles	Moisture	IS 1485: 1993	0.5 % to 12.0 %
		Total Ash on Dry Basis	IS 1485: 1993	1.0 % to 3.0 %
		Acid Insoluble Ash on Dry Basis	IS 1485: 1993	0.01 % to 0.5 %
		Salt As NaCl (As NaCl) on Dry Basis	IS 1797: 1985, DGHS, Lab Manual 5, Page. 10 (2005)	0.1 % to 5.0 %

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	Base Noodles	Free Acidity, ml of 1 N NaOH /100g Of Sample	IS 1485: 1993	0.01 ml to 2.0ml
		Rehydration	DGHS Manual 5, Page. 51 (2005)	100 % to 250 %
		Total Solid in Gruel	IS 1485: 1993	6.0 % to 16.0 %
		Free Fatty Acids Of Extracted Fat As Oleic Acid	IS 548 (Part 1): 1964	0.01 % to 1.0 %
		Peroxide Value Of Extracted Fat	IS 548 (Part 1): 1964	0.01 meq/kg to 30 meq/kg
		Para-Anisidine Value Of Extracted Fat	AOCS Cd 18-90 (6 th Edition): 2010	1 to 60
		Fat Content	IS 12575: 2010	10 % to 50 %
		Protein (N x 6.25)	IS 7219: 1973	1 % to 20 %
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	1 % to 90.0 %
		Energy	FAO Food and Nutrition Paper 77, (2003)	(100 kcal to 800 kcal)/100g
		Total Sugars	CQAL/INST/STP-03 Issue. 04, Dated. 20-08-2014	0.01 % to 80.0 %
N.	Plain Pasta	Colour	ITC-FBD/AOP/RTE/FG-16/01 Issue. 02, Dated. 6-11-2014	Qualitative
		Texture After Cooking	ITC-FBD/AOP/RTE/FG-16/01 Issue. 02, Dated. 6-11-2014	Qualitative

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	Plain Pasta	Spiral Length	ITC-FBD/AOP/RTE/FG-16/02 Issue. 02, Dated. 6-11-2014	5 mm to 30 mm
		Thickness	ITC-FBD/AOP/RTE/FG-16/02 Issue. 02, Dated. 6-11-2014	0.9 mm to 1.2 mm
		Moisture	IS 1485: 1993	5.0 % to 14.0 %
		Total Ash (On Dry Basis)	IS 1485: 1993	0.1 % to 5.0 %
		Acid Insoluble Ash On Dry Basis	IS 1485: 1993	0.01 % to 0.05 %
		Nitrogen (On Dry Basis)	IS 1485: 1993	1.2 % to 3.0 %
		Total Solids In Gruel	IS 1485: 1993	2 % to 10.0 %
		Protein (N x 5.7)	IS 7219: 1973	2 % to 30 %
		Total Fat	DGHS Manual 6 Page. 39 (2005)	0.1 to 50.0
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	0.1 % to 90.0 %
		Energy	FAO Food and Nutrition Paper 77, (2003)	(40.0 kcal to 80 kcal)/100g
		Total Sugars	DGHS Manual 5 Page. 15 (2005)	0.01 % to 80.0 %

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O.	Black Gram/Urd Dal, Red Gram/Tur Dal/Arhar Dal, Bengal Gram, Horse Gram	Extraneous Matter & Other Refraction	IS 1797: 1985	0.001% to 10.0 %
		Moisture	DGHS Manual 3, Page. 17 (2005)	0.1 % to 20.0 %
		Total Ash	DGHS Manual 3, Page. 17 (2005)	0.1 % to 1.0 %
		Acid Insoluble Ash	DGHS Manual 3, Page. 18 (2005)	0.01 % to 0.5 %
P.	Corn Meal	Moisture	DGHS Manual 3, Page. 17 (2005)	5 % to 15 %
		Total Ash	DGHS Manual 3, Page. 17 (2005)	0.1 % to 1.0 %
		Acid Insoluble Ash	DGHS Manual 3, Page. 18 (2005)	0.01 % to 0.5 %
		Fat	IS 7836: 1975	0.01 % to 5.0 %
Q.	Rice Meal	Moisture Content	DGHS Manual 3, Page. 17 (2005)	5 % to 15 %
		Total Ash	DGHS Manual 3, Page. 17 (2005)	0.1 % to 1.0 %
		Acid Insoluble Ash	DGHS Manual 3, Page. 18 (2005)	0.01 % to 0.5 %
		Fat Content	IS 7836: 1975	0.01 % to 5.0 %

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	Rice Meal	Amylose	ITC/FBD/AOP/SF/RM-02/08, Issue. 03, Dated. 9-09-2014	15 % to 45 %
R.	Gram Meal	Moisture Content	DGHS Manual 3, Page. 17 (2005)	5 % to 15 %
		Total Ash	DGHS Manual 3, Page. 17 (2005)	0.1 % to 5.0 %
		Acid Insoluble Ash	DGHS Manual 3, Page. 18 (2005)	0.01 % to 0.5 %
S.	Maida, Wheat Fibre, White Oats, Whole Wheat Atta, Multigrain Atta, Wheat, Soya Flour, Gram Flour, Maize Flour, Oat Flour, Psyllium Husk, Base Noodles, Plain Pasta, Black Gram/Urad Dal, Red Gram/Toor Dal/Arhar Dal, Bengal Gram, Horse Gram, Corn Meal, Rice Meal, Gram Meal	Saturated Fatty Acid	CQAL/INST/STP-07 AOAC (19 th Edition) 996.06: 2012 Issue. 04, Dated. 20-08-2014	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Mono Unsaturated Fatty Acid	Issue. 04, Dated. 20-08-2014	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Poly Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Total Trans Fatty Acid	CQAL/INST/STP-36 AOAC (19 th Edition) 996.06: 2012 Issue. 04, Dated. 20-08-2014	0.03 g/100g to 20 g/100g LOD: 0.01 g/100g
		Cholesterol	CQAL/INST/STP-24 AOAC (994.10) Issue. 04, Dated. 20-08-2014	0.001 g/100g to 1 g/100g LOD: 0.0003 g/100g
		Sodium	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 03, Dated. 20-08-2014	2.0 mg/kg to 1000 mg/kg LOD: 1 mg/kg
		Calcium	Issue. 03, Dated. 20-08-2014	2.0 mg/kg to 1000 mg/kg LOD: 1 mg/kg

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	Maida, Wheat Fibre, White Oats, Whole Wheat Atta, Multigrain Atta, Wheat, Soya Flour, Gram Flour, Maize Flour, Oat Flour, Psyllium Husk, Base Noodles, Plain Pasta, Black Gram/Urad Dal, Red Gram/Toor Dal/Arhar Dal, Bengal Gram, Horse Gram, Corn Meal, Rice Meal, Gram Meal	Iron		2.0 mg/kg to 1000 mg/kg LOD: 1 mg/kg
		Potassium	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012	0.5 mg/kg to 1000 mg/kg LOD: 0.2 mg/kg
		Magnesium	Issue. 03, Dated. 20-08-2014	2.0 mg/kg to 1000 mg/kg LOD: 0.5 mg/kg
		Zinc		1.0 mg/kg to 1000 mg/kg LOD: 0.6 mg/kg
		Copper		0.8 mg/kg to 1000 mg/kg LOD: 0.6 mg/kg
		Vitamin A	CQAL/INST/STP-54 Issue. 04, Dated. 20-08-2014	100 IU/kg to 50000 IU/kg LOD: 30 µg/kg
		Vitamin E		2.0 mg/kg to 500 mg/kg LOD: 0.5 mg/kg
		Vitamin C	CQAL/INST/STP-52 Issue. 04, Dated. 20-08-2014	5 mg/kg to 5000 mg/kg LOD: 2 mg/kg
		Vitamin B1 (Thiamin)	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	2 mg/kg to 500 mg/kg LOD: 0.5 mg/kg
		Vitamin B2 (Riboflavin)		
		Vitamin B3 (Niacin)	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	2 mg/kg to 500 mg/kg LOD: 0.5 mg/kg
		Vitamin B9 (Folic Acid)		1 mg/kg to 500 mg/kg LOD: 0.5 mg/kg
		Vitamin B12	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	100 µg/kg to 5000 µg/kg LOD: 30 µg/kg

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7.	Coffee And Cocoa Products			
A.	Cocoa Powder	Odour & Taste	ITC-FBD/AOP/SENSORY-08 Issue. 01 Dated. 23-09-2015, ASTM E2139-05: 2011	Qualitative
		Moisture	DGHS Manual 4, Page. 19 (2005), IS 1164: 1986	0.01-10.0 %
		Total Ash (Moisture & Fat Free Basis)	DGHS Manual 4, Page. 3 (2005), IS 1164: 1986	1.0 % to 20.0 %
		Acid Insoluble Ash (Moisture & Fat Free Basis)	DGHS Manual 4, Page. 5 (2005), IS 1164: 1986	0.01 % to 3.0 %
		Alkalinity Of Ash (As K ₂ O, Moisture & Fat Free Basis)	IS 1164: 1986	1.0 % to 15.0 %
		Cocoa Butter - For Low Fat (Moisture Free Basis)	DGHS Manual 4, Page. 19 (2005), IS 1164: 1986	5.0 % to 20.0 %
B.	Plain Chocolate Chips	Count	ITC-FBD/AOP/BS/RM-56/01 Issue. 03 Dated. 3-05-2011	(100 to 1500)/100g
		Moisture	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	0.01 % to 5.0 %
		Total Fat Content On Dry Basis	DGHS Manual 4, Page. 68 (2005), IS 1163: 1992	5.0 % to 50.0 %
		Cocoa Solids, Moisture And Fat Free Basis	DGHS Manual 4, Page. 73 (2005)	2.0 % to 20.0 %

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C.	Plain Chocolate Chips	Acid Insoluble Ash (Moisture, Sugar & Fat Free Basis)	DGHS Manual 4, Page. 5 (2005), IS 11923: 1986	0.01 % to 0.5 %
		Sugar (Sucrose) On Dry Basis	IS 1163: 1992	20.0 % to 80.0 %
	Dark Chocolate	Colour	ITC-FBD/AOP/SENSORY-08 Issue. 01 Dated. 23-09-2015, ASTM E2139-05: 2011	Qualitative
		Taste	ITC-FBD/AOP/SENSORY-08 Issue. 01 Dated. 23-09-2015, ASTM E2139-05: 2011	Qualitative
		Total Fat Content On Dry Basis	DGHS Manual 4, Page. 68 (2005), IS 1163: 1992	10.0 % to 50.0 %
		Moisture	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	0.01 % to 5.0 %
		Moisture by KF	IS 2362: 1993	0.01 % to 5.0 %
		Cocoa Solids (Moisture & Fat Free Basis)	DGHS Manual 4, Page. 73 (2005)	5.0 % to 20.0 %
		Acid Insoluble Ash (Moisture, Sugar & Fat Free Basis)	DGHS Manual 4, Page. 5 (2005), IS 11923: 1986	0.01 % to 0.5 %
		Particle Size	ITC-FBD/AOP/BS/RM-70/07 Issue. 03 Dated. 3-052011	1.0 µ to 50.0 µ
		Sugar	IS 1163: 1992	20.0-80.0 %

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D.	Choco Cream	Taste	ITC-FBD/AOP/SENSORY-08 Issue. 01 Dated. 23-09-2015, ASTM E2139-05: 2011	Qualitative
		Moisture	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	0.01 % to 5.0 %
		Cocoa Solids	DGHS Manual 4, Page. 73 (2005)	5.0 % to 20.0 %
		Particle Size	ITC-FBD/AOP/BS/RM-75/05 Issue. 03 Dated. 3-05-2011	1.0 µ to 50µ
		Total Fat	DGHS Manual 4, Page. 68 (2005), IS 1163: 1992	25 % to 50 %
E.	Choco Covering	Moisture by Oven Method	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	0.01 % to 5.0 %
		Moisture By KF	IS 2362: 1993	0.01 % to 5.0 %
		Total Fat	DGHS Manual 4, Page. 68 (2005), IS 1163: 1992	10 % to 35 %
		Particle Size, Micron	ITC-FBD/AOP/BS/RM-75/05 Issue. 03 Dated. 3-05-2011	1.0 µ 50 µ
F.	Cocoa Butter	Colour	ITC-FBD/AOP/SENSORY-08 Issue. 01 Dated. 23-09-2015, ASTM E2139-05: 2011	Qualitative
		Taste	ITC-FBD/AOP/SENSORY-08 Issue. 01 Dated. 23-09-2015, ASTM E213 9-05-2011	Qualitative

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	Cocoa Butter	Mineral Oil	IS 528 (Part 2): 1976	Qualitative
		Melting Point	IS 1263: 1986	20°C to 45 °C
		Free Fatty Acid As Oleic Acid	DGHS Manual 2, Page. 28 (2005)	0.01 % to 5.0 %
		Saponification Value	DGHS Manual 2, Page. 21 (2005)	(150 mg to 250 mg) KOH/g
		Iodine Value	DGHS Manual 2, Page. 30 (2005)	25 to 50
		Refractive Index At 40°C	DGHS Manual 2, Page. 5 (2005)	1.0 to 2.0
G.	Chocolate Paste	Moisture Content	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	0.1 % to 2 %
		Total Fat Content On Dry Basis	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	20 % to 40 %
		Sucrose Content On Dry Basis	IS 1163: 1992	1 % to 45 %
		Acid Insoluble Ash (On Moisture, Fat Free Basis)	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	0.01 % to 0.2 %
		Alkalinity Of Total Ash As K ₂ O In (Moisture And Fat Free Basis)	IS 1164: 1986	0.01 % to 5 %

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8.	Pure Coffee			
A.	Roasted Coffee, Ground Coffee, and Coffee Green/Raw/Unroasted/Liquid Coffee Concentrate	Moisture	IS 3077: 1992	0.1 % to 15.0 %
		Total Ash on Dry Basis	IS 3077: 1992	0.1 % to 15.0 %
		Acid Insoluble Ash on Dry Basis	IS 3077: 1992	0.01 % to 2.0 %
		Water Soluble Ash on Dry Basis	IS 3077: 1992	40.0 % to 99.0 %
		Alkalinity Of Soluble Ash on Dry Basis	IS 3077: 1992	1.0 % to 15.0 %
		Aqueous Extract(Water Soluble Matter) on Dry Basis	IS 3077: 1992	10 % to 90 %
		Total Fat on Dry Basis	IS 3077: 1992	0.1 % to 30.0 %
		Total Carbohydrates	FAO, Food and Nutrition Paper 77, (2003)	10 % to 90 %
		Energy	FAO, Food and Nutrition Paper 77, (2003)	(50 kcal to 600 kcal)/100g
B.	Soluble Pure Coffee Powder	Total Protein	IS 7219: 1973	0.5 % to 30.0 %
		Moisture	IS 2791: 1992	0.2 % to 15.0 %
		Total Ash on Dry Basis	IS 2791: 1992	0.1 % to 20.0 %
		Solubility In Boiling Water	IS 2791: 1992	5 s to 50 s
		Solubility In Cold Water 16 ± 2 C	IS 2791: 1992	1 min to 6 min

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	Soluble Pure Coffee Powder	Total Fat on Dry Basis	IS 3077: 1992	0.1 % to 20.0 %
		Total Carbohydrates	FAO, Food and Nutrition Paper 77, (2003)	10 % to 90 %
		Energy	FAO, Food and Nutrition Paper 77, (2003)	(50 kcal to 600 kcal)/100g
		Total Protein	IS 7219: 1973	0.5 % to 40.0 %
C.	Chicory			
a.	Roasted Chicory	Moisture	IS 612: 1992	0.5 % to 15.0 %
		Total Ash on Dry Basis	IS 612: 1992	1.0 % to 20 %
		Acid Insoluble Ash On Dry Basis	IS 612: 1992	0.1 % to 2.0 %
		Aqueous Extract(Water Soluble Matter) on Dry Basis	IS 612: 1992	20.0 % to 90.0 %
		Total Fat on Dry Basis	IS 3077: 1992	0.1 % to 20.0 %
		Total Protein	IS 7219: 1973	0.5 % to 20.0 %
		Total Carbohydrates	FAO, Food and Nutrition Paper 77, (2003)	10 % to 99 %
		Energy	FAO, Food and Nutrition Paper 77, (2003)	(50 kcal to 600 kcal)/100g
b.	Roasted Coffee Chicory Mixture	Moisture	IS 3077: 1992	0.5 % to 15.0 %

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	Roasted Coffee Chicory Mixture	Total Ash on Dry Basis	IS 3077: 1992	1.0 % to 20 %
		Acid Insoluble Ash on Dry Basis	IS 3077: 1992	0.01 % to 5.0 %
		Aqueous Extract (Water Soluble Matter) on Dry Basis	IS 3077: 1992	30.0 % to 98.0 %
		Total Fat on Dry Basis	IS 3077: 1992	0.1 % to 30.0 %
		Protein	IS 7219: 1973	0.5 % to 35.0 %
		Total Carbohydrates	FAO, Food and Nutrition Paper 77, (2003)	10 % to 90 %
		Energy	FAO, Food and Nutrition Paper 77, (2003)	(50 kcal to 600 kcal)/100g
D.	Soluble Coffee Chicory			
a.	Instant Coffee Chicory Mixture	Moisture	IS 2791: 1992	0.5 % to 15.0 %
		Total Ash on Dry Basis	IS 2791: 1992	1.0 % to 30 %
		Acid Insoluble Ash on Dry Basis	IS 3077: 1992	0.1 % to 5.0 %
		Solubility In Boiling Water	IS 2791: 1992	5 s to 50 s
		Solubility In Cold Water 16 ± 2 C	IS 2791: 1992	1 min to 6 min
		Total Fat on Dry Basis	IS 3077: 1992	0.1 % to 20.0 %
		Protein	IS 7219: 1973	0.5 % to 30.0 %

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	Instant Coffee Chicory Mixture	Total Carbohydrates	FAO, Food and Nutrition Paper 77, (2003)	10 % to 99 %
		Energy	FAO, Food and Nutrition Paper 77, (2003)	(100 kcal to 600 kcal)/100g
b.	White Cream	Moisture Content (LOD)	IS 6287: 1985	0.1 % to 2 %
		Total Fat Content on Dry Basis	IS 1163: 1992	27 % to 32 %
		Sucrose Content on Dry Basis	IS 4079: 1967	45 % to 51 %
		Acid Insoluble Ash (on Moisture, Fat & Sugar Free Basis)	IS 1163: 1992	0.01 % to 0.2 %
c.	Coffee Extract	Moisture Content	IS 4467: 1996	20 % to 25 %
d.	Cocoa Liquor, Cocoa Mass	Moisture Content	IS 11923: 1986	0.1 % to 5 %
		Fat Content	IS 11923: 1986	45 % to 65 %
		pH Of 10 % Solution	IS 11923: 1986	3.5 to 5.5
e.	Butterscotch Chips	Aroma & Taste	ITC-FBD/AOP/SENSORY-08 Issue. 01 Dated. 23-09-2015, ASTM E2139-05: 2011	Qualitative
		Moisture	IS 1164: 1986	% to 5 %
		Total Fat	IS 1164: 1986	5.0 % to 20.0 %

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E.	Ganache Chocolate			
a.	Milk Chocolate Ganache, Dark Chocolate Ganache	Moisture	AOAC (19 th Edition) 977.10: 2012	0.1 % to 30.0 %
		Total Fat, on Dry Basis	DGHS Manual 4, Page. 67, IS 1163: 1992	2.0 % to 70.0 %
		Milk Fat, on Dry Basis	DGHS Manual 4, Page. 67, IS 1163: 1992	0.1 % to 40.0 %
		Cocoa Solids, (Moisture And Fat Free Basis)	DGHS Manual 4, Page. 67, IS 1163: 1992	0.1 % to 20.0 %
		Milk Solids	IS 1163: 1992	0.01 % to 20.0 %
		Total Ash	DGHS Manual 4, Page. 67, IS 1163: 1992	0.1 % to 10.0 %
		Acid Insoluble Ash	DGHS Manual 4, Page. 67, IS 1163: 1992	0.005 % to 2.0 %
		Water Activity	AOAC (19 th Edition) 978.18: 2012	0.650 to 0.999
		Sugars (Sucrose)	IS 1163: 1992	5.00 % to 60.0 %
		Protein	AOAC (19 th Edition) 970.22: 2012	0.01 % to 15.0 %
		Carbohydrates	FAO, Food & Nutrition, Paper 77, (2003)	10.0 % to 65.0 %
		Energy Kcal/100g	FAO, Food & Nutrition, Paper 77, (2003)	(300 kcal to 700 kcal)/100g

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b.	Inner Filled Chocolate	Moisture	AOAC (19 th Edition) 977.10: 2012	0.1 % to 15.0 %
		Total Fat, On Dry Basis	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	2.0 % to 55.0 %
		Milk Fat, On Dry Basis	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	0.005 % to 40.0 %
		Cocoa Solids (Moisture And Fat Free Basis)	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	0.1 % to 40.0 %
		Total Ash	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	0.1 % to 12.0 %
		Acid Insoluble Ash	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992	0.005 % to 2.0 %
		Sugars (Sucrose)	IS 1163: 1992	5.00 % to 65.0 %
		Protein	AOAC (19 th Edition) 970.22: 2012	0.01 % to 15.0 %
		Carbohydrates	FAO, Food & Nutrition, Paper 77, (2003)	10.0 % to 70.0 %
		Energy	FAO, Food & Nutrition, Paper 77, (2003)	300 kcal/100g to 700 kcal/100g

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c.	Cocoa Powder, Plain Chocolate Chips, Dark Chocolate, Choco Cream, Choco Covering, Cocoa Butter, Chocolate Paste, Pure Coffee, Coffee-Chicory Powder, White Cream, Coffee Extract, Cocoa Liquor, Cocoa Mass, Butterscotch Chips, Inner Filled Chocolate, Ganache Chocolate	Saturated Fatty Acid	CQAL/INST/STP-07 AOAC (19 th Edition) 996.06: 2012 Issue. 04, Dated. 20-08-2014	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Mono Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Poly Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Total Trans Fatty Acid	CQAL/INST/STP-36 AOAC (19 th Edition) 996.06: 2012 Issue. 04, Dated. 20-08-2014	0.03 g/100g to 20 g/100g LOD: 0.01 g/100g
		Cholesterol	CQAL/INST/STP-24 AOAC (19 th Edition) 994.10: 2012 Issue. 04, Dated. 20-08-2014	0.001 g/100g to 1 g/100g LOD: 0.001 g/100g
		Sodium	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 03, Dated. 20-08-2014	2.0 µg/kg to 1000 µg/kg LOD: 0.5 µg/kg
		Calcium		2.0 mg/kg to 1000 mg/kg LOD: 1 mg/kg
		Iron		2.0 mg/kg to 1000 mg/kg LOD: 1 mg/kg
		Potassium		0.5 mg/kg to 1000 mg/kg LOD: 0.2 mg/kg
		Magnesium		2.0 mg/kg to 1000 mg/kg LOD: 0.5 mg/kg

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	Cocoa Powder, Plain Chocolate Chips, Dark Chocolate, Choco Cream, Choco Covering, Cocoa Butter, Chocolate Paste, Pure Coffee, Coffee-Chicory Powder, White Cream, Coffee Extract, Cocoa Liquor, Cocoa Mass, Butterscotch Chips, Inner Filled Chocolate, Ganache Chocolate	PhosPhorus	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 03, Dated. 20-08-2014	2.0 mg/kg to 1000 mg/kg LOD: 0.5 mg/kg
		Zinc		1.0 mg/kg to 1000 mg/kg LOD: 0.6 mg/kg
		Copper		0.8 mg/kg to 1000 mg/kg LOD: 0.6 mg/kg
		Caffeine	CQAL/INST/STP-01, AOAC (19 th Edition) 980.01: 2012, Issue. 04, Dated. 20-08-2014	5 mg/kg to 10 20 mg/kg LOD: 0.5 mg/kg
		Theobromine	CQAL/INST/STP-46, AOAC (19 th Edition) 980.01: 2012, Issue. 04, Dated. 20-08-2014	20 mg/kg to 10 550 mg/kg LOD: 0.5 mg/kg
		Hydrogen Cyanide	CQAL/INST/STP-79 Issue. 04, Dated. 20-08-2014	1 µg/kg to 300 µg/kg
		Hydrogen Phosphide	CQAL/INST/STP-80 Issue. 04, Dated. 20-08-2014	5 µg/kg to 300 µg/kg
		Inorganic Bromide	CQAL/INST/STP-81 Issue. 04, Dated. 25-11-2015	10 µg/kg to 300 µg/kg
		Sugar Profile		
		Fructose	CQAL/INST/STP-03 Issue. 04, Dated. 20-08-2014	0.5 g/100g to 100 g/100g LOD: 0.03 g/100g
		Glucose		
		Sucrose		
		Maltose		
		Lactose		

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9.	Milk And Dairy Products			
A.	Skimmed Milk Powder	Moisture	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992,	0.1 % to 10.0 %
		Total Ash Odb	DGHS Manual 4, Page. 67 (2005), IS 1163: 1992,	5.0 % to 15.0 %
		Titration Acidity (ml 0.1 N NaOH / 10g Solids Not Fat)	DGHS Manual 1, Page. 67 (2005)	5.0 ml to 25.0ml
		Titration Acidity As Lactic Acid	DGHS Manual 1, Page. 67 (2005)	0.1 % to 5 %
		Milk Fat	DGHS Manual 1, Page. 66 (2005)	0.05 % to 5.0 %
		Protein (N x 6.38) In Milk Solids Not Fat	DGHS Manual 1, Page. 34 (2005)	20 % to 50 %
		Insolubility Index	IS 12759: 1989	0.1 ml to 5.0 ml
		Lactose Content	DGHS Manual 1, Page. 49 (2005)	40 % to 60 %
		Bulk Density	IS 16033: 2012	0.4 g/ml to 1.0 g/ml
		Scoarched Particles	IS 13500: 1992	0 to 50 mg (Disc-A,B,C,D)
		Total Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	1 % to 20 %
		Energy	FAO Food and Nutrition Paper 77, (2003)	(50 kcal to 500 kcal)/100g

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B.	Whey Powder	Moisture	DGHS Manual 1, Page. 84 (2005)	0.01 % to 10.0 %
		Milk Fat	DGHS Manual 1, Page. 65 (2005)	0.05 % to 5.0 %
		Milk Protein (N X6.38)	DGHS Manual 1, Page. 44 (2005), AOAC (19 th Edition) 991.23: 2012	1.0 % to 20.0 %
		Total Ash On Dry Basis	DGHS Manual 1, Page. 68 (2005)	5.0 % to 15.0 %
		pH Of 10 % Solution	DGHS, Manual 1, Page. 85 (2005)	2.0 % to 8.0
		Lactose Content, As Anhydrous Lactose On Dry Basis	DGHS Manual 1, Page. 49 (2005)	40 % to 85 %
C.	Condensed Milk, Sweetened Condensed Milk	Moisture	DGHS Manual 1, Page. 47 (2005)	20 % to 35 %
		Total Milk Solids	DGHS Manual 1, Page. 48 (2005)	20 % to 40 %
		Total Fat	DGHS Manual 1, Page. 65 (2005)	1.0 % to 15.0 %
		Titratable Acidity, As Lactic Acid	DGHS Manual 1, Page. 63 (2005)	0.01 % to 1.0 %
		Sucrose	DGHS Manual 1, Page. 49 (2005)	30 % to 50 %

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D.	Condensed Milk, Sweetened Condensed Milk	Protein In Milk Solids not Fat	DGHS Manual 1, Page. 34 (2005)	20 % to 50 %
		Lactose Crystal Size (70 % Of Lactose Crystals)	IS 1166: 1986	1 μ to 25μ
	Butter	Moisture	DGHS Manual 1, Page. 76 (2005)	1.0 % to 25.0 %
		Titration Acidity, As Lactic Acid	IS 3507: 1966	0.01 % to 0.5 %
		Salt as NaCl	DGHS Manual 1, Page. 78 (2005)	0.02 % to 5.0 %
		Milk Solids not Fat	DGHS Manual 1, Page. 77 (2005)	0.1 % to 5.0 %
		Total Fat	DGHS Manual 1, Page. 77 (2005)	60 % to 100 %
		Curd Content	DGHS Manual 1, Page. 77 (2005)	0.1 % to 2.0 %
		Free Fatty Acid Of Melted Butter as Oleic Acid	DGHS Manual 1, Page. 81 (2005)	0.01 % to 0.30 %
		Baudouin Test	IS 10633: 1999	Qualitative
		Reichert – Meissl Value	DGHS Manual 1 Page. 81 (2005)	20 to 32
		Polenske Value	DGHS Manual 2, Page. 35 (2005)	1.0 to 3.0

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	Butter	Butyro Refractometer Reading At 40° C	DGHS Manual 1 Page. 81 (2005)	40 to 50
		Peroxide Value	DGHS Manual 1 Page. 81 (2005)	0.1 meg/kg to 10 meg/kg
		Colour Value	ITC-FBD/ AOP/DAIRY/FG-01/ 16	L= 0 to 100 units, a = (-)100 units to 100 units, b = 0 to 100 units
E.	Butter Oil	Free Fatty Acid As Oleic Acid	DGHS Manual 1, Page. 81 (2005)	0.01 % to 0.4 %
		Moisture	DGHS Manual 1, Page. 80 (2005)	0.01% to 0.4 %
F.	Dairy Whitener	Flavors & Taste	ITC-FBD/AOP/SENSORY-08 Issue. 01 Dated. 23-09-2015,	Qualitative
		Colour	ASTM E2139-05: 2011	Qualitative
		Overall Sensory Evaluation (After Reconstitution)		Qualitative
		Description	IS 12299: 1998	Qualitative
		Moisture	IS 12299: 1998	1 % to 5 %
		Ash on DB	IS 12299: 1998	0.1-10.0 %
		Acid Insoluble Ash on Dry Basis	IS 12299: 1998	0.01 % to 0.15 %
		Insolubility Index	IS 12299: 1998	0.1 ml to 2.0 ml

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Dairy Whitener	Milk Fat	IS 12299: 1998	15 % to 22 %
		Milk Solids (Not Fat)	IS 12299: 1998	50 % to 60 %
		Total Added Sugar (As Sucrose)	IS 12299: 1998	10 % to 25 %
		Bulk Density, G/ml	IS 16033: 2012	0.4 g/ml to 1.0 g/ml
		Scoarched Particles	IS 13500: 1992	0 to 50 mg(Disc-A,B,C,D)
		Colour Value – Hunter Lab	ITC-FBD/AOP/Dairy/FG-01/17	L = 1 units to 100 units a = (-)100 units to 100 units b = 1 units to 100 units
		Titrateable Acidity As Lactic Acid, %	DGHS Manual 1, Page. 63 (2005)	0.5 % to 2.0 %
		pH Of 10 % Solution	DGHS Manual 5, Page. 12 (2005)	1 to 14
		Total Carbohydrates, %	FAO Food and Nutrition Paper 77, (2003) DGHS Manual 1, Page. 68 (2005)	1 % to 20 %
		Energy, Kcal/100g	FAO Food and Nutrition Paper 77, (2003)	(50 kcal to 500 kcal)/100g
		Protein (N X 6.38), %	DGHS Manual 1, Page. 44 (2005)	(20 % to 40 %

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G.	Ghee	Moisture	IS 3508: 1966	0.05 % to 0.5 %
		Free Fatty Acids As Oleic Acid	IS 3508: 1966	0.1 % to 5.0 %
		Butyro Refractometer Reading At 40°C	IS 3508: 1966	40 to 50
		Baudouin Test	IS 3508: 1966	Qualitative
		Peroxide Value	DGHS Manual 1, Page. 81 (2005)	0.1 to 10
		RM Value	DGHS Manual 1, Page. 81 (2005)	20 to 32
		Polenske Value	DGHS Manual 2, Page. 40 (2005)	1.0 to 3.0
		Holde's Test	DGHS Manual 2, Page. 76 (2005)	Qualitative
		Rancidity Test	DGHS Manual 2, Page. 99 (2005)	Qualitative
		Curd Content	DGHS Manual 1 Page. 77 (2005)	0.01 % to 0.5 %
		Titratable Acidity, % Lactic Acid	IS 3507: 1966	0.01 % to 0.5 %
		Total Fat	DGHS Manual 1 Page. 77 (2005)	10 % to 100 %
		Total Protein	DGHS Manual 1 Page. 44 (2005)	0.1 % to 6.0 %

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	Ghee	Total Ash	IS 1479 (Part 2): 1961	0.1 % to 0.5 %
		Total Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	0 to 5 %
		Energy	FAO Food and Nutrition Paper 77, (2003)	(50 kcal to 900 kcal)/100g
		Colour Value	ITC-FBD/ AOP/DAIRY/FG-01/ 16	L= 0 to 100 units, a = 0 to 100 units, b = 0 to 100 units
H.	Eggless Mayonnaise/ Seasoned Cheese Blend	Total Soluble Solids	AOAC (19 th Edition) 935.56: 2012, DGHS Manual 5 Page. 50 (2005), IS 5861: 1993	10 % to 25 %
		Titratable Acidity	AOAC (19 th Edition) 935.57: 2012, IS 13844: 2003	0.1 % to 1.0 %
		Salt as NaCl	DGHS Manual 5 Page. 10 (2005)	0.2 % to 2.0 %
		pH	DGHS Manual 5 Page. 12 (2005)	1.0 to 14
I.	Milk	Water Content	DGHS Manual 1 Page. 23 (2005)	70 % to 90 %
		Total Solids	DGHS Manual 1 Page. 23 (2005)	1 % to 40 %
		Total Fat	DGHS Manual 1 Page. 25 (2005)	1 % to 10 %

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	Milk	Total Protein(As N X 6.38)	DGHS Manual 1 Page. 44 (2005)	0.1 % to 6 %
		Total Ash	IS 1479 (Part 2): 1961	0.1 % to 2.0 %
		Total Carbohydrates	DGHS Manual 1 Page. 68 (2005)	1 % to 20 %
		Acidity (As Lactic Acid)	DGHS Manual 1 Page. 63 (2005)	0.01 % to 5.0 %
		pH (As is Basis)	DGHS Manual 5 Page. 12 (2005)	0 to 14
		Lactose	DGHS Manual 1 Page. 85 (2005)	1 % to 10 %
		Energy	FAO Food and Nutrition Paper 77, (2003)	10 kcal/100g to 150 kcal/100g
		Clot on Boiling Test (COB)	IS 1479 (Part 1): 1960	Qualitative
		Alcohol Test	IS 1479 (Part 1): 1960	Qualitative
		Heat Stability Test	ITC-FBD/AOP/DAIRY/RM-01/39	Qualitative
		Neutralizer (Rosalic Acid)	DGHS Manual 1 Page. 12 (2005)	Qualitative
		Starch Test	DGHS Manual 1 Page. 3 (2005)	Qualitative

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	Milk	Sodium Chloride Test	DGHS Manual 1 Page. 10 (2005)	Qualitative
		Cane Sugar	DGHS Manual 1 Page. 1 (2005)	Qualitative
		Formalin	DGHS Manual 1 Page. 1 (2005)	Qualitative
		Nitrate Compounds	DGHS Manual 1 Page. 1 (2005)	Qualitative
J.	Milkshake	Flavour & Taste	ITC-FBD/AOP/SENSORY-08 Issue. 01 Dated. 23-09-2015, ASTM E2139-05: 2011	Qualitative (Sensory score)
		Colour		Qualitative (Sensory score)
		Body/Consistency		Qualitative (Sensory score)
		Overall Sensory Evaluation		Qualitative (Sensory score)
		Water content	DGHS Manual 1 Page. 23 (2005)	60 % to 90 %
		Total Solids	DGHS Manual 1 Page. 23 (2005)	1 % to 40 %
		Total Fat	DGHS Manual 1 Page. 25 (2005)	1 % to 10 %

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	Milkshake	Total Protein (As N X 6.38)	DGHS Manual 1 Page. 44 (2005)	0.1 % to 6 %
		Total Ash	IS 1479 (Part 2): 1961 (2005)	0.1 % to 2.0 %
		Total Carbohydrates	DGHS Manual 1 Page. 68 (2005)	1 % to 20 %
		Acidity (As Lactic Acid)	DGHS Manual 1 Page. 63 (2005)	0.01 % to 5.0 %
		pH (As Is Basis)	DGHS Manual 5 Page. 12 (2005)	0 to 14
		Total Sugars	DGHS Manual 1 Page. 49 (2005)	1 % to 20 %
		Sucrose	DGHS Manual 1 Page. 49 (2005)	0.1 % to 15 %
		Energy	FAO Food and Nutrition Paper 77, (2003)	10 kcal/100g to 150 kcal/100g
K.	Cheese (All Varieties)	Moisture	DGHS Manual 1 Page. 40 (2005)	10 % to 100 %
		Total Fat	DGHS Manual 1 Page. 40 (2005)	20 % to 60 %
		Total Protein (As N X 6.38)	DGHS Manual 1 Page. 44 (2005)	0.1 To 50 %
		Total Ash	IS 1479 (Part 2): 1961	0.1 % to 10 %

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	Cheese (All Varieties)	Total Carbohydrates	DGHS Manual 1 Page. 68 (2005)	1 % to 20 %
		pH (As Is Basis)	DGHS Manual 5 Page. 44 (2005)	1 to 14
		Acidity (As Lactic Acid)	DGHS Manual 1 Page. 63 (2005)	0.01 % to 5 %
		Salt	IS 2785: 1979	0 to 5 %
L.	Skimmed Milk Powder, Whey Powder, Condensed Milk, Sweetened Condensed Milk, Butter, Butter Oil, Dairy Whitener, Ghee, Eggless Mayonnaise, Seasoned Cheese Blend, Milk, Milkshake, Cheese	Saturated Fatty Acid	CQAL/INST/STP-07 AOAC (19 th Edition) 996.06: 2012 Issue. 04, Dated. 20-08-2014	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Mono Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Poly Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Total Trans Fatty Acid	CQAL/INST/STP-36 AOAC (19 th Edition) 996.06: 2012 Issue. 04, Dated. 20-08-2014	0.03 g/100g to 20 g/100g LOD: 0.01 g/100g
		Cholesterol	CQAL/INST/STP-24 AOAC (19 th Edition) 994.10: 2012 Issue. 04, Dated. 20-08-2014	0.001 g/100g to 1 g/100g LOD: 0.001 g/100g
		Sodium	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	2.0 µg/kg to 1000 µg/kg LOD: 0.5 µg/kg

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	Skimmed Milk Powder, Whey Powder, Condensed Milk, Sweetened Condensed Milk, Butter, Butter Oil, Dairy Whitener, Ghee, Eggless Mayonnaise, Seasoned Cheese Blend, Milk, Milkshake, Cheese	Calcium	CQAL/INST/STP-41 AOAC (19 th Edition) 999.10: 2012	2.0 mg/kg to 1000 mg/kg LOD: 1 mg/kg
		Iron	Issue. 04, Dated. 20-08-2014	2.0 mg/kg to 1000 mg/kg LOD: 1 mg/kg
		Potassium		0.5 mg/kg to 1000 mg/kg LOD: 0.2 mg/kg
		Magnesium		2.0 mg/kg to 1000 mg/kg LOD: 0.5 mg/kg
		Phosphorus		2.0 mg/kg to 1000 mg/kg LOD: 0.5 mg/kg
		Zinc		1.0 mg/kg to 1000 mg/kg LOD: 0.6 mg/kg
		Copper		0.8 mg/kg to 1000 mg/kg LOD: 0.6 mg/kg
		Lead	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Tin		1.2 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Cadmium		0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Arsenic	CQAL/INST/STP-39 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.1 mg/kg to 10 mg/kg LOD: 0.04 mg/kg

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	Skimmed Milk Powder, Whey Powder, Condensed Milk, Sweetened Condensed Milk, Butter, Butter Oil, Dairy Whitener, Ghee, Eggless Mayonnaise, Seasoned Cheese Blend, Milk, Milkshake, Cheese	Mercury	CQAL/INST/STP-40 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg
		Hydrogen Cyanide	CQAL/INST/STP-79 Issue. 04, Dated. 20-08-2014	1 µg/kg to 300 µg/kg
		Hydrogen Phosphide	CQAL/INST/STP-80 Issue. 04, Dated. 20-08-2014	5 µg/kg to 300 µg/kg
		Inorganic Bromide	CQAL/INST/STP-81 Issue. 04, Dated. 25-11-2015	15 µg/kg to 300 µg/kg
10.	Starch And Starch Products			
A.	Dextrose Mono Hydrate	Solubility	IS 874: 1992	Qualitative
		Loss on Drying	IS 874: 1992	1 % to 15.0 %
		Dextrose Equivalent On Dry Basis	IS 873: 1974	80 % to 100 %
		Acidity, (ml Of 0.1 NaOH Required To Neutralize 0.5g Material)	IS 874: 1992	0.05 ml to 0.5 ml
		Sulphur Dioxide	IS 874: 1992	20 mg/l to 100 mg/l
		Sulphated Ash	IS 15279: 2003	0.01 % to 1 %

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B.	Liquid Glucose	Total Solids	DGHS Manual 4, Page. 51 (2005), IS 873: 1974	80 % to 86 %
		Ash, on Dry Basis	IS 873: 1974	0.01 % to 0.3 %
		pH Of 50 % Solution At 25 ° C	IS 4706 (Part 2): 1978	1 to 14
		Dextrose Equivalent on Dry Basis	IS 873: 1974	35 to 44 %
C.	Maize Starch	Solubility	IS 874: 1992	Qualitative
		Moisture	IS 4706 (Part 2): 1978	0.01 % to 20.0 %
		Total Ash on Dry Basis	IS 4706 (Part 2): 1978	0.01 % to 5.0 %
		Acid Insoluble Ash on Dry Basis	IS 4706 (Part 2): 1978	% to 5.0 %
		Alcoholic Acidity, (ml of 1N NaOH Required to Neutralize 100g Material, On Dry Basis)	IS 1009: 1979	0.1 ml to 5.0ml
D.	High Maltose Corn Syrup	Lovibond Colour	IS 873: 1974	(0.1 to 90) Y (0.1 to 90) B (0.1 to 90) R
		Dextrose Equivalent	IS 873: 1974	40 % to 47 %
		Total Solids	IS 873: 1974	70 % to 80 %
		Total Ash	IS 4706 (Part 2): 1978	0.01 % to 0.3 %
		pH	IS 4706 (Part 2): 1978	1 to 14
		Acid Insoluble Ash	IS 6287: 1985	0.01 % to 0.03 %

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	High Maltose Corn Syrup	Sulphur Dioxide	IS 4706 (Part 2): 1978	1 mg/l to 200 mg/l
		Starch Test	ITC-FBD/AOP/CF/RM-02/07 Issue. 04 Dated. 11-10-2010	Qualitative
E.	Malto Dextrin	Moisture	DGHS Manual 4, Page. 36 (2005)	1 % to 5 %
		Reducing Sugar (As Dextrose Equivalent)	IS 873: 1974	18 % to 25 %
		pH of 10 % Aqueous	IS 4706 (Part 2): 1978	1 to 14
F.	Crystal Gum	Moisture (Loss On Drying)	IS 4706 (Part 2): 1978	1 % to 14 %
		pH of 20 % Aqueous Solution	IS 4706 (Part 2): 1978	1 to 14
G.	Elastigel	Loss on Drying	IS 4706 (Part 2): 1978	1 % to 15 %
		pH of 20 % Solution	IS 4706 (Part 2): 1978	1 to 14
H.	Gum Arabic	Moisture Content	IS 6795: 2007	1 % to 15 %
		pH of 20 % Aqueous Extract	IS 15557: 2005	1 to 14
I.	Rice Starch	Moisture	DGHS Manual 3, Page. 17 (2005)	1 % to 15 %
		Total Ash	DGHS Manual 3, Page. 17 (2005)	0.1 % to 1 %
		Acid Insoluble Ash	DGHS Manual 3, Page. 18 (2005), IS 4706 (Part 2): 1978	0.01 % to 0.2 %

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J.	Pectin	Loss on Drying	IS 15929: 2012	0.1 % to 10 %
	Dextrose	Acid Insoluble Ash	IS 15929: 2012	0.01 % to 2.5 %
	Monohydrate,			
	Liquid Glucose,			
	Maize Starch,			
	High Maltose			
	Corn Syrup,			
	Maltodextrin,			
	Crystal Gum,			
	Elastigel, Gum			
	Arabic, Rice			
	Starch, Pectin			
11.	Food Additives & Preservatives			
A.	Iodised Salt As NaCl	Moisture	IS 7224: 2006	0.05 % to 2.0 %
		Water Insoluble Matter	IS 7224: 2006	0.05 % to 1.5 %
		Chloride Content (Purity)	IS 7224: 2006	80 % to 100 %
		Iodine	IS 7224: 2006	1 mg/kg to 50 mg/kg
		Calcium	IS 7224: 2006	0.05 % to 0.25 %
		Magnesium	IS 7224: 2006	0.05 % to 0.25 %
		Sulphate	IS 7224: 2006	0.02 % to 0.7 %
B.	Edible Common Salt as NaCl	Moisture	IS 253: 1985/ IS 7224: 2006	0.05 % to 1.5 %
		Chloride Content (As NaCl) on Dry Basis	IS 253: 1985/ IS 7224: 2006	95.0 % to 105.0 %

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Edible Common Salt as NaCl	Matter Insoluble In Water	IS 253: 1985/ IS 7224: 2006	0.1 % to 3.0 %
		Matter Souble In Water Other Than NaCl, Dry Basis	IS 253: 1985/ IS 7224: 2006	0.1 % to 5.0 %
C.	Emulsifiers			
a.	Finamul 9750	Iodine Value	IS 548 (Part 1): 1964	0.1 to 5.0
		Acid Value	Food Chemical Codex, (8 th Edition)	(20 mg to 80 mg of KOH)/g
		Moisture	IS 548 (Part 1): 1964	1.0 % to 10.0 %
		Melting Point	IS 548 (Part 1): 1964	40.0 °C to 60.0 °C
b.	Finamul 90	Saponification Value	IS 548 (Part 1): 1964	140 to 180
		Iodine Value	IS 548 (Part 1): 1964	0.1 to 5.0
		Acid Value	Food Chemical Codex, (8 th Edition)	(0.1 mg to 10.0 mg) of KOH/g
		Melting Point	IS 548 (Part 1): 1964	60.0 °C to 80.0 °C
c.	Sodium Stearoyl Lactylate	Solubility in Ethanol, Hot Oil, Dispersible In Hot Water	Food Chemical Codex, (8 th Edition)	Qualitative
		Acid Value	Food Chemical Codex, (8 th Edition)	50 mg to 90 mg of KOH/g
		Ester Value	Food Chemical Codex, (8 th Edition)	100 to 200

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d.	Lecithin	Identification Test	Food Chemical Codex, (8 th Edition)	Qualitative
		Purity, As Acetone Insoluble Residue	IS 5055: 1996	30 % to 80 %
		Acid Value	IS 5055: 1996	0.1 mg to 50 mg KOH/g
		Moisture	IS 5055: 1996	0.01 % to 5.0 %
		Hexane Insoluble Matter	IS 5055: 1996	0.01 % to 0.5 %
		Peroxide Value	Food Chemical Codex, (8 th Edition)	1 meq/kg to 25 meq/kg
e.	Datem	Acid Value	IS 548 (Part 1): 1964	60 to 100
		Saponification Value	IS 548 (Part 1): 1964	450 to 550
		Iodine Value	IS 548 (Part 1): 1964	20 to 80
f.	Pectin	Galacturonic Acid	IS 15929: 2012	50 to 80
		Degree Of Esterification	IS 15929: 2012	50 to 75
		SAG Value	ITC/FBD/AOP/CFRM-52/04 Issue. 05 Issue Dated. 11-08-2014	150
g.	Soya Lecithin Powder	Purity	IS 5055: 1996	90 to 100
h.	Vamipol	Free Acetic Acid	IS 15929: 2012	0 to 1.0

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
i.	Glyceryl Mono Stearate	Moisture Content	IS 2362: 1963	0.1 % to 2 %
		Melting Point	IS 9953: 1981	54 to 60
		Acid Value	IS 9953: 1981	(0.1 mg to 6 mg KOH)/g
		Monostearate Content	IS 9953: 1981	40 % to 46 %
		pH of 3 % W/W Emulsion In Water	IS 15557: 2005	1 to 14
D.	Synthetic food Colours in Biscuits Hard Boiled Confectionery, Toffees, Lozenges Potato Chips Namkeens Ready To Eat Products By Products Coffee, Cocoa And By Products Milk And Dairy Products Spices And Condiments Fruit Juices And Concentrates	Tartrazine	CQAL/INST/STP-04 Issue. 04, Dated. 20-08-2014	30 mg/kg to 300 mg/kg LOD: 10 mg/kg
		Indigocarmine		30 mg/kg to 300 mg/kg LOD: 10 mg/kg
		Ponceau 4r		30 mg/kg to 300 mg/kg LOD: 10 mg/kg
		Sunset Yellow		30 mg/kg to 300 mg/kg LOD: 10 mg/kg
		Carmoisine		150 mg/kg to 1500 mg/kg LOD: 50mg/kg
		Fast Green		30 mg/kg to 300 mg/kg LOD: 10 mg/kg
		Brilliant Blue		30 mg/kg to 300 mg/kg LOD: 10 mg/kg
		Erythrosine		150 mg/kg to 1500 mg/kg LOD: 50mg/kg

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
E.	Artificial Sweeteners in Biscuits Confectionery Ready to Eat Juices Chocolate Milk & Dairy Products	Saccharin Sodium	CQAL/INST/STP-58 Issue. 04, Dated. 20-08-2014	10 mg/kg to 10000 mg/kg LOD: 10 mg/kg
		Aspartame (Methylester)		10 mg/kg to 10000 mg/kg LOD: 10 mg/kg
		Acesulfame		10 mg/kg to 10000 mg/kg LOD: 10 mg/kg
		Sucralose	CQAL/INST/STP-32 Issue. 04, Dated. 20-08-2014	500 mg/kg LOD: 100 mg/kg
F.	Biscuits Hard Boiled Confectionery, Toffees, Lozenges Potato Chips Namkeens Ready To Eat Products By Products Coffee, Cocoa And By Products Milk And Dairy Products Spices And Condiments Fruit Juices And Concentrates	Agaric Acid	CQAL/INST/STP-60 Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Hydrocyanic Acid	CQAL/INST/STP-61 Issue. 04, Dated. 20-08-2014	1 µg/kg to 300 µg/kg
		Hypericine	CQAL/INST/STP-44 Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Saffrole	CQAL/INST/STP-45 Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg

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G.	Food Products includes Bakery & Confectionery products Potato Chips Namkeens Instant mixes Fruit & Vegetable products Ready to eat products Cereals, pulses and its products Coffee, Cocoa and products Milk and Dairy Products Spices and Condiments Fruit Juices and Concentrates	Glutamic Acid	CQAL/INST/STP-47 Issue. 04, Dated. 20-08-2014	40 mg/kg to 10000 mg/kg LOD: 4 mg/kg
		Melamine	CQAL/INST/STP-21 Issue. 04, Dated. 20-08-2014	1 mg/kg to 100 mg/kg LOD: 0.3 mg/kg
12.	Food Grade Chemicals			
A.	Sodium Meta Bisulphite	Purity As SO ₂	IS 4752: 1994	40 % to 100 %
		Water Insoluble Matter	IS 4752: 1994	0.01 % to 0.2 %
		pH Of 5 % Aq. Solution	IS 2124: 2000	1 to 14
		Thiosulphate	IS 4751: 1994	Qualitative

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B.	Sodium Bicarbonate	Purity, As NaHCO ₃	IS 2124: 2000	80 % to 105.0 %
		Matter Insoluble In Water On Dry Basis	IS 2124: 2000	0.01 % to 0.5 %
		pH Of 1 % Aqueous Solution	IS 2124: 2000	1 to 14
C.	Ammonium Bicarbonate	Ammonium Bicarbonate	IS 2697: 1976	80 % to 105 %
		Non-Volatile Matter	Food Chemical Codex, (8 th Edition)	0.01 % to 0.5 %
D.	Sodium Acid Pyro Phosphate	Identification Test	Food Chemical Codex, (8 th Edition)	Qualitative
		Solubility In Water	Food Chemical Codex, (8 th Edition)	Qualitative (Soluble /Insoluble)
		Assay	Food Chemical Codex, (8 th Edition)	80 % to 105 %
		Water Insoluble Matter	IS 4752: 1994	0.01 % to 3 %
		pH Of 1 % Solution	IS 15557: 2005	1.0 to 14
E.	Lactic Acid	Assay As C ₃ H ₆ O ₃ By Mass	IS 9971: 1981	80 % to 100 %
		Sulphated Ash	IS 9971: 1981	0.01 % to 0.5 %
F.	Citric Acid	Moisture	IS 2362: 1963	0.01 % to 15.0 %
		Purity As Citric Acid On Dry Basis	IS 13186: 1991	80 % to 105 %

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	Citric Acid	Sulphated Ash	IS 13186: 1991	0.01 % to 0.2 %
G.	Malic Acid	Moisture	IS 14124: 1994	0.01 to 1.0
		Purity, As C ₄ H ₆ O ₆ On Dry Basis	IS 14124: 1994	80 % to 105 %
		Residue on Ignition on Dry Basis	IS 14124: 1994	0.01 % to 0.5 %
		Water Insoluble Matter	IS 14124: 1994	0.01 % to 0.5 %
H.	Propylene Glycol	Sulphated Ash On Dry Basis	IS 13702: 1993	0.01 % to 0.2 %
		Moisture	IS 2362: 1993	0.05 % to 0.5 %
I.	Sodium Citrate	Purity As Sodium Citrate On Dry Basis	IS 5058: 1996	99 % to 100 %
		Moisture Content	IS 5058: 1996	10 % to 15 %
J.	Stearic Acid	Saponification Value	IS 548 (Part 1): 1964	207 to 212
		Acid Value	IS 548 (Part 1): 1964	100 mg to 500 mg KOH/g
		Iodine Value	IS 548 (Part 1): 1964	1 to 3
		Mineral Acidity	IS 1675: 1971	Qualitative
		Lovibond Colour	IS 548 (Part 1): 1964	(0.1 to 90)Y (0.1 to 90)B (0.1 to 90)R
K.	Butylated Hydroxy Anisole (Bha)	Sulphated Ash	IS 5343: 1996	0.01 % to 0.05 %

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L.	Calcium Carbonate	Identification – Calcium Appendix III A	Food Chemical Codex (8 th Edition)	Qualitative
		Loss On Drying	Food Chemical Codex (8 th Edition)	0.01 % to 10.0 %
		Assay	Food Chemical Codex (8 th Edition)	80 to 100.0 %
		Acid Insoluble Substances (On Dry Basis)	Food Chemical Codex (8 th Edition)	0.01 % to 1.0 %
M.	Sodium Carbonate	Identification –Sodium & Carbonate Appendix Iii A	Food Chemical Codex (8 th Edition)	Qualitative
		Loss On Drying	Food Chemical Codex (8 th Edition)	0.01 % to 10.0 %
		Assay	Food Chemical Codex (8 th Edition)	80 to 100.0 %
		pH (1 % Solution)	Food Chemical Codex (8 th Edition)	1 to 14
N.	Potassium Carbonate	Identification - Potassium & Carbonate Appendix III A	Food Chemical Codex (8 th Edition)	Qualitative
		Loss On Drying	Food Chemical Codex (8 th Edition)	0.01 % to 10.0 %
		Assay	Food Chemical Codex (8 th Edition)	80 to 100.0 %

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O.	Potassium Carbonate	pH (1 % Solution)	Food Chemical Codex (8 th Edition)	1 to 14
		Insoluble Substances	Food Chemical Codex (8 th Edition)	0.01 % to 5.0 %
	Di Sodium Phosphate	Identification- Potassium & Sodium Appendix Iii A	Food Chemical Codex (8 th Edition)	Qualitative
		Loss On Drying	Food Chemical Codex (8 th Edition) IS 567: 1993	0.01 % to 10.0 %
		Assay	Food Chemical Codex (8 th Edition) IS 567: 1993	80 % to 100.0 %
P.	Tetra Sodium Pyrophosphate	pH (1 % Solution)	Food Chemical Codex (8 th Edition)	1 to 14
		Insoluble Substances	Food Chemical Codex (8 th Edition)	0.01 % to 5.0 %
		Identification –Sodium Appendix Iiia	Food Chemical Codex (8 th Edition)	Qualitative
		Loss On Ignition	Food Chemical Codex (8 th Edition)	0.01 % to 10.0 %
		Assay	Food Chemical Codex (8 th Edition)	80 to 100.0 %
		pH (1 % Solution)	Food Chemical Codex (8 th Edition)	1 to 14

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Q.	Sodium Hexa Meta Phosphate	Identification – Sodium Appendix III A	Food Chemical Codex (8 th Edition)	Qualitative
		Loss On Drying	Food Chemical Codex (8 th Edition)	0.01 % to 10.0 %
		Assay	Food Chemical Codex (8 th Edition)	20 % to 80 %
		pH (1 % Solution)	Food Chemical Codex (8 th Edition)	1 to 14
R.	Sodium Acetate	Moisture Content By KF	IS 2362: 1993	0.1 % to 2 %
		Assay As Acetic Acid	Food Chemical Codex (8 th Edition)	30 % to 50 %
		Assay As Sodium Acetate	Food Chemical Codex (8 th Edition)	50 % to 70 %
S.	Yeast Extract Powder	Moisture Content By KF	IS 2362: 1993	1 % to 7 %
		Total Nitrogen	IS 7219: 1973	1 % to 15 %
		Salt As NaCl	IS 1797: 1985	% to 50 %
		pH Of Aqueous Extract	IS 4706 (Part 2): 1978	1 to 14
T.	Ribotide	Moisture Content	Food Chemical Codex (8 th Edition)	10 % to 50 %
		pH Of 1:20 Solution	Food Chemical Codex (8 th Edition)	5 to 10

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
U.	Salt, Emulsifiers, Food Grade Chemicals	Lead	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Copper		0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Tin		1.2 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Zinc	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	1.0 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Cadmium		0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Arsenic	CQAL/INST/STP-39 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.3 mg/kg
		Mercury	CQAL/INST/STP-40 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg
13.	Food Colours			
A.	Caramel	Soluble In Water	IS 4467: 1996	Qualitative
		Solids Content	IS 4467: 1996	40 % to 75 %
		Colour Intensity	IS 4467: 1996	0.01 % to 1.0 %
		pH	IS 15557: 2005	1 to 14.0

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
B.	Ponceau 4R , Sunset Yellow, Tartrazine, Erythrosine, Carmoisine, Brilliant Blue, Indigo Carmine	Total Dye Content	IS 1697: 1994	75 % to 100 %
		Loss On Drying at 135°C	IS 1699: 1995	0.1 % to 10.0 %
		Water Insoluble In Matter	IS 1699: 1995	0.001 % to 0.5 %
C.	Annatto Powder	Identification	IS 2557: 1994	Qualitative
		Annatto Extract In Water, Expressed As Norbixin	IS 2557: 1994	0.1 % to 2.0 %
D.	Liquid Flavors	Specific Gravity At 25°C	Food Chemical Codex (8 th Edition)	0.8 to 1.2
		Refractive Index At 25°C	Food Chemical Codex (8 th Edition)	1.3 to 1.9
		Specific Gravity At 20°C	Food Chemical Codex (8 th Edition)	0.1 to 1.3
		Refractive Index At 20°C	Food Chemical Codex (8 th Edition)	1.3 to 1.9
E.	Solid Flavour - Menthol	Melting Point	Food Chemical Codex (8 th Edition)	40 °C to 50 °C
F.	Biscuits Hard Boiled Confectionery, Toffees, Lozenges Potato Chips	Coumarin	CQAL/INST/STP-59 Issue. 04, Dated. 20-08-2014	Qualitative
		Dihydrocoumarin		Qualitative
		Tonkabean(Dipteryl Adorat)		Qualitative

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	Namkeens Ready To Eat Products By Products Coffee, Cocoa And By Products Milk And Dairy Products Spices And Condiments Fruit Juices And Concentrates, Flavors	Alpha-Asarone	CQAL/INST/STP-59 Issue. 04, Dated. 20-08-2014	Qualitative
		Estragole		Qualitative
		Ethyl Methyl Ketone		Qualitative
		Ethyl-3 Phenylglycidate	CQAL/INST/STP-59 Issue. 04, Dated. 20-08-2014	Qualitative
		P-Propylanisole		Qualitative
		Methyl Beta-Naphthyl Ketone		Qualitative
		Alpha And Beta - Thujone		Qualitative
		Saffrole & Isosaffrole		Qualitative
		Diethylene Glycol And Monoethyl Ether		Qualitative
14.	Honey And Honey Products			
A.	Honey	Freedom From Foreign Matter	IS 4941: 1994	Qualitative
		Colour	IS 4941: 1994	Qualitative
		Fiehe's Test	IS 4941: 1994	Qualitative
		Optical Density At 660nm	IS 4941: 1994	0.1 to 0.5
		Moisture	IS 4941: 1994	1 % to 25 %
		Specific Gravity	IS 4941: 1994	1.10 to 1.70
		Total Reducing Sugars	IS 4941: 1994	50 % to 75 %

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Honey	Ash	IS 4941: 1994	0.1 % to 0.6 %
		Acidity (Expressed As Formic Acid)	IS 4941: 1994	0.05 % to 0.3 %
		Fructose/Glucose Ratio	IS 4941: 1994	0.9 to 1.4
		Sucrose	IS 4941: 1994	0.2 % to 8 %
15.	Spices And Condiments			
A.	Chilli Flakes	Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	5.0 % to 20.0 %
		Total Ash On Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	1.0 % to 15.0 %
		Acid Insoluble Ash on Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Seed Content	IS 1797: 1985	1 to 50 nos.
B.	Nutmeg	Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	5.0 % to 15.0 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005)	0.1 % to 10.0 %
		Acid Insoluble Ash on Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 1.0 %
		Volatile Oil Content on Dry Basis	DGHS Manual 10, Page. 14(2005), IS 1797: 1985	2.0 % to 10.0 %v/w

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	Nutmeg	Non-Volatile Ether Extract on Dry Basis	DGHS Manual 10, Page. 13 (2005), IS 1797: 1985	10.0 % to 40.0 %
		Crude Fibre	DGHS Manual 10, Page. 18 (2005), IS 1797:1985	5.0 % to 30.0 %
C.	Cinnamon	Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.1 % to 15.0 %
		Volatile Oil Content On Dry Basis	DGHS Manual 10, Page. 14 (2005), IS 1797: 1985	0.05 % to 2.0 %v/w
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	2.0 % to 10.0 %
		Acid Insoluble Ash on Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 3.0 %
D.	Elaichi/ Cardamom	Flavour	IS 1907:1984	Qualitative
		Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.1 % to 20.0 %
		Volatile Oil Content on Dry Basis	DGHS Manual 10, Page. 14 (2005), IS 1797: 1985	0.1 % to 5.0 %v/w
		Extraneous Matter In Seeds	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.01 % to 10 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	1.0 % to 20.0 %
E.	Masala Mix/ Curry Paste	Moisture	DGHS Manual 5, Page. 51 (2005)	10 % to 40 %

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Masala Mix/ Curry Paste	Total Soluble Solids	IS 5861: 1993	40 % to 75 %
		Titratable Acidity	IS 11765: 1986	0.2 % to 2.0 %
		Salt As NaCl	IS 1797: 1985, DGHS Manual 5 Page. 8 (2005)	2.0 % to 15.0 %
		pH	DGHS Manual 5 Page. 12 (2005)	1.0 to 14
		Water Activity	AOAC (19 th Edition) 978.18: 2012	0.1 to 1.0
F.	Export Sauces	Total Soluble Solids	IS 5861: 1993	1 % to 20 %
		Titratable Acidity	IS 11765: 1986	0.1 % to 2.0 %
		Salt As NaCl	IS 1797: 1985	0.2 % to 3.0 %
		pH	DGHS Manual 5 Page. 12 (2005)	1.0 % to 14
G.	Chilli Whole	Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	5.00 % to 16.0 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	4.00 % to 8.0 %
		Acid Insoluble Ash on Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		ASTA Color Value	ASTA Method 20.1	30 to 180

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
H.	Pasta Saucemaker, Mix	Moisture	DGHS Manual 5 Page. 34 (2005)	1.0 % to 8.0 %
		Titratable Acidity	AOAC (19 th Edition) 935.57: 2012	0.1 % to 3.0 %
		Salt as NaCl	IS 1797: 1985	0.5 % to 25 %
		pH	DGHS Manual 5 Page. 12 (2005)	1.0 to 14
		Protein	IS 7219: 1973	0.1 % to 40.0 %
		Total Fat	DGHS Manual 6 Page. 39 (2005)	0.1 % to 50.0 %
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	0.1 % to 90.0 %
		Total Ash	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	5 % to 25 %
		Energy Kcal/100g	FAO Food and Nutrition Paper 77, (2003)	40.0 kcal/100g to 80 kcal/100g
		Total Sugars	DGHS Manual 5 Page. 15 (2005)	0.01 % to 80.0 %
I.	Turmeric Whole	Moisture	DGHS Manual 10, Page. 2 (2005)	5.0 % to 16.0 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	4.0 % to 10.0 %

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	Turmeric Whole	Acid Insoluble Ash On Dry Basis	DGHS Manual 10, Page. 7 (2005)	0.01 % to 2.0 %
		Curcumin on Dry Basis	IS 10925: 1984 , DGHS Manual 10, Page. 32 (2005)	1.0 % to 7.0 %
		Chromate Test	IS 3576: 1994	Qualitative (Negative/Positive)
J.	Coriander Whole	Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	5.0 % to 16.0 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	4.0 % to 8.0 %
		Acid Insoluble Ash on Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Volatile Oil on Dry Basis	DGHS Manual 10, Page. 14 (2005), IS 1797: 1985	0.02 % to 0.8 %v/w
K.	Chilli Powder	Granulation / Particle Size: (Above 500 µ)	ITC-FBD/AOP/ST/FG-03/01 Issue. 03 Dated. 21-10-2013	1 % to 100.0 %
		Granulation / Particle Size: (500 to 250 µ)	ITC-FBD/AOP/ST/FG-03/01 Issue. 03 Dated. 21-10-2013	1 % to 100.0 %
		Granulation / Particle Size: (Below 250 µ)	ITC-FBD/AOP/ST/FG-03/01 Issue. 03 Dated. 21-10-2013	1 % to 100.0 %
		Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	5.0 % to 16.0 %

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	Chilli Powder	Total Ash On Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	4.0 % to 8.0 %
		Acid Insoluble Ash (In Dilute HCl) On Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Crude Fibre, db	DGHS Manual 10, Page. 18 (2005), IS 1797: 1985	14.0 % to 36.0 %
		Non-Volatile Ether Extract On Dry Basis	DGHS Manual 10, Page. 13 (2005), IS 1797: 1985	0.10 % to 26.0 %
		ASTA Color Value	ASTA (METHOD 20.1)	30 to 180
L.	Turmeric Powder	Granulation / Particle Size: (Above 500 µ)	ITC-FBD/AOP/ST/FG-04/01 Issue. 03 Dated. 21-10-2013	1 % to 100.0 %
		Granulation / Particle Size: (Below 118 µ)	ITC-FBD/AOP/ST/FG-04/01 Issue. 03 Dated. 21-10-2013	1 % to 100.0 %
		Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	5.0 % to 16.0 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	4.0 % to 10.0 %
		Acid Insoluble Ash (In Dilute HCl) On Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Starch on Dry Basis	IS 4706 (Part 2): 1978	40.0 % to 70.0 %
		Curcumin on Dry Basis	IS 10925: 1984, DGHS Manual 10, Page. 32 (2005)	1.0 % to 7.0 %

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	Turmeric Powder	Chromate Test (Qualitative)	IS 3576: 1994	Qualitative (Negative/Positive)
M.	Coriander Powder	Granulation / Particle Size: (Above 500 µ)	ITC-FBD/AOP/ST/FG-05/01 Issue. 03 Dated. 21-10-2013	1 % to 100.0 %
		Granulation / Particle Size: (500 To 250 µ)	ITC-FBD/AOP/ST/FG-05/01 Issue. 03 Dated. 21-10-2013	1 % to 100.0 %
		Granulation / Particle Size: (Below 250 µ)	ITC-FBD/AOP/ST/FG-05/01 Issue. 03 Dated. 21-10-2013	1 % to 100.0 %
		Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	5.0 % to 16.0 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	4.0 % to 8.0 %
		Acid Insoluble Ash (In Dilute HCl) On Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Volatile Oil on Dry Basis	DGHS Manual 10, Page. 14 (2005), IS 1797: 1985	0.02 % to 0.8 %v/w
N.	Blended Spices	Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	1.0 % to 12.0 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	2.0 % to 12.0 %
		Acid Insoluble Ash (In Dilute HCl) on Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %

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	Blended Spices	Non Volatile Ether Extract On Dry Basis	DGHS Manual 10, Page. 13 (2005), IS 1797: 1985	0.10 % to 26.0 %
		Crude Fibre on Dry Basis	DGHS Manual 10, Page. 18 (2005), IS 1797: 1985	5.0 % to 30.0 %
		Salt As NaCl, (As NaCl) On Dry Basis	IS 1797: 1985	0.1 % to 20.0 %
		Granulation / Particle Size: (Above 500 µ)	ITC-FBD/AOP/ST/FG-12/09 Issue. 01 Dated. 21-10-2013	1 % to 100.0 %
		Granulation / Particle Size: (500 To 250 µ)	ITC-FBD/AOP/ST/FG-12/09 Issue. 01 Dated. 21-10-2013	1 % to 100.0 %
		Fat Content	DGHS Manual 10, Page. 13 (2005), IS 1797: 1985	10 % to 50 %
		Protein (N x 6.25)	IS 7219: 1973	1 % to 20 %
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	0.1 % to 90.0 %
		Energy Kcal/100g	FAO Food and Nutrition Paper 77, (2003)	(40.0 kcal to 80 kcal)/100g
		Total Sugars	DGHS Manual 5	0.01 % to 80.0 %
O.	Fenugreek - Whole	Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.1 % to 20.0 %
		Total Ash Db	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	0.5 to 8.0

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	Fenugreek - Whole	Acid Insoluble Ash (In Dilute HCl) On Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
P.	Dehydrated Curry Leaves	Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.1 % to 20.0 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	0.1 % to 10.0 %
		Acid Insoluble Ash (In Dilute HCl) On Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Test For Peroxidase	Lab Manual 5-DGHS	Qualitative (Positive/Negative)
Q.	Garlic Powder	Moisture by Karl Fischer	IS 2362: 1993	1 % to 10 %
		Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.1 % to 20.0 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	% to 10.0 %
		Acid Insoluble Ash (In Dilute Hcl) On Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Test For Peroxidase	Lab Manual 5 –DGHS	Qualitative
R.	Compounded Asafoetida	Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.1 % to 20.0 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	0.1 % to 10.0 %

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	Compounded Asafoetida	Acid Insoluble Ash (In Dilute HCl) On Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Alcoholic Extract	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.1 % to 50.0 %
S.	Black Pepper- Whole	Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.1 % to 20.0 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	2.0 to 12.0 %
		Acid Insoluble Ash (In Dilute HCl) on Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Volatile Oil, On Dry Basis	DGHS Manual 10, Page. 14 (2005), IS 1797: 1985	0.1 % to 5.0 %v/w
		Non Volatile Ether Extract, On Dry Basis	DGHS Manual 10, Page. 13 (2005), IS 1797: 1985	0.10 % to 30.0 %
T.	Ginger Powder	Moisture by Karl Fischer	IS 2362: 1993	0.1% to 10 %
		Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.1 % to 20.0 %
		Total Ash Db	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	2.0 % to 12.0 %
		Acid Insoluble Ash (In Dilute HCl) On Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Calcium as CaO	DGHS Manual 10, Page. 10, IS 1797: 1985	0.01 % to 10.0 %

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	Ginger Powder	Water Soluble Ash on Dry Basis	IS 1797: 1985	0.01 % to 10.0 %
		Volatile Oil on Dry Basis	DGHS Manual 10, Page. 14 (2005), IS 1797: 1985	0.1 % to 2.0 %v/w
		Cold Water Soluble Extract on Dry Basis	DGHS Manual 10, Page. 8, IS 1797: 1985	1 % to 80.0 %
		Alcoholic Extract	DGHS Manual 10, Page. 9, IS 1797: 1985	1 % to 80.0 %
U.	Whole Black Mustard	Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.1 % to 20.0 %
		Total Ash Db	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	2.0 % to 12.0 %
		Acid Insoluble Ash (In Dilute HCl) On Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Volatile Oil on Dry Basis	DGHS Manual 10, Page. 14 (2005), IS 1797: 1985	0.02 % to 0.8 %v/w
		Non Volatile Ether Extract On Dry Basis	DGHS Manual 10, Page. 13 (2005), IS 1797: 1985	0.10 % to 30.0 %
V.	Cumin Whole	Extraneous Matter	IS 1797: 1985	0.1 % to 10.0 %
		Moisture	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.1 % to 20 %
		Total Ash on Dry Basis	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	2.0 % to 12.0 %

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	Cumin Whole	Acid Insoluble Ash (In Dilute HCl) On Dry Basis	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.0 %
		Volatile Oil on Dry Basis	DGHS Manual 10, Page. 14 (2005), IS 1797: 1985	0.02 % to 0.8 %v/w
		Non Volatile Ether Extract On Dry Basis	DGHS Manual 10, Page. 13 (2005), IS 1797: 1985	0.10 % to 30.0 %
W.	Seasoning/ Masala Mix	Moisture Content by KF	IS 2362: 1993	1 to 20
		Moisture By Halogen Moisture Analyser	ITC-FBD/AOP/ST/FG-09/02 Issue. 01 Dated. 22-11-2013	0.5 % to 12 %
		Colour Values – L, A, B	ITC-FBD/AOP/SF/RM-03/03 Issue. 02, Dated. 25-05-2010	(-)10 to 50
		Salt as NaCl Content By Autotitrator	IS 1797: 1985, DGHS Manual 5, Page. 51 (2005)	0.1 % to 40 %
		Acidity	AOAC (19 th Edition) 935.57: 2012	0.01 % to 10 %
X.	Onion Powder	Moisture Content by Toluene Distillation	IS 4452: 1967	1 % to 6 %
		Moisture Content by KF	IS 2362: 1993	1 % to 6 %
		Total Ash	IS 4452: 1967	1 % to 6 %
		Acid Insoluble Ash	IS 4452: 1967	0.01 % to 1.0 %

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Y.	Paprika Oleoresin	Moisture Content	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	0.1 % to 1.0 %
		Colour Value	IS 13663: 1993	30,000 to 2,00000
Z.	Clove Leaf Oil	Refractive Index	AOAC (19 th Edition) 921.08: 2012	1.3 to 1.9
Aa.	Cassia Oil	Refractive Index	AOAC (19 th Edition) 921.08: 2012	1.3 to 1.9
		Specific Gravity	AOAC (19 th Edition) 920.13: 2012, Food Chemical Codex (8 th Edition)	1 to 1.5
		Optical Rotation	Food Chemical Codex (8 th Edition)	(-)0.001 to 1.1
Ab.	Amchur Powder	Moisture Content	IS 2362: 1993	1 % to 10 %
		Moisture Content	DGHS Manual 10, Page. 2 (2005), IS 1797: 1985	1 % to 10 %
		Total Ash	DGHS Manual 10, Page. 5 (2005), IS 1797: 1985	1 % to 10 %
		Acid Insoluble Ash	DGHS Manual 10, Page. 7 (2005), IS 1797: 1985	0.01 % to 2.5 %
		Salt as NaCl	IS 1797: 1985	1 % to 10 %
		Acidity	IS 1797: 1985	1 % to 50 %

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	Amchur Powder	Crude Fiber	DGHS Manual 10, Page. 18 (2005), IS 1797: 1985	1 % to 30 %
16.	Sugar And By Products			
A.	Refined Sugar, Plantation White Sugar	Moisture	DGHS Manual 4, Page. 36 (2005)	0.02 % to 0.2 %
		Sucrose	DGHS Manual 1, Page. 37 (2005)	85 % to 100 %
		Sucrose by Polarimetry	DGHS Manual 4, Page. 38 (2005)	85 % to 100 %
		Sulphur Dioxide	IS 4706 (Part 2): 1978	1 mg/l to 200 mg/l
		Water Insoluble In Matter	IS 15279: 2003	0.01 % to 5.0 %
		Color	IS 15279: 2003	1 to 200
		Total Ash	DGHS Manual 4, Page. 35 (2005)	0.01 % to 0.3 %
		Acid Insoluble Ash	IS 6287: 1985	0.01 % to 0.03 %
		Sugar Profile		
		Fructose	CQAL/INST/STP-03 In house Method Issue. 04, Dated. 20-08-2014	0.5 g/100g to 100 g/100g LOD: 0.03 g/100g
		Glucose		
		Sucrose		
		Maltose		
		Lactose		

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17.	Nuts And Nut Products			
A.	Cashew	Aroma	ASTM Method-E-1871-97-Reapproved 2004	Qualitative
		Taste	ASTM Method-E-1871-97-Reapproved 2004	Qualitative
		Extraneous Vegetable Matter	DGHS Manual 5, Page. 50 (2005)	0.01 % to 10 %
		Moisture	DGHS Manual 5, Page. 34 (2005)	0.1 % to 10 %
		Acidity of Extracted Fat As Oleic Acid	IS 1011: 2002	0.1 % to 5.0 %
B.	Almond	Moisture	DGHS Manual 5, Page. 34 (2005)	0.1 % to 10 %
		Acidity of Extracted Fat, As Oleic Acid	IS 1011: 2002	0.1 % to 3.0 %
		Extraneous Vegetable Matter	DGHS Manual 5, Page. 50 (2005)	0.01 % to 10 %
C.	Raisins	Moisture	DGHS Manual 5, Page. 34 (2005)	1 % to 25, %
		Count/100g	ITC-FBD/AOP/BS/RM-40/01 Issue. 03 Dated. 3-052011	1 to 1000
		Sugared Raisins	ITC-FBD/AOP/BS/RM-40/03 Issue. 03 Dated. 3-052011	1 % to 25 %

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	Raisins	Damaged Raisins	ITC/FBD/AOP/BS/RM/40-03	1 % to 20 %
18.	Fruit & Fruit Products			
A.	Orange Juice Powder	Ash on Dry Basis	DGHS Manual 5, Page. 51 (2005)	1.0 % to 10.0 %
		pH of 5 % Solution	DGHS Manual 5, Page. 12 (2005)	1.0 % to 14.0
		Dextrose Equivalent	IS 6287: 1985	10.0 % to 50.0 %
B.	Strawberry Juice Powder	Ash on Dry Basis	DGHS Manual 5, Page. 51 (2005)	1.0 % to 10.0 %
		pH of 1 % Solution	DGHS Manual 5, Page. 12 (2005)	1.0 to 14.0
C.	Jamun Juice, Orange Juice, Pineapple Juice, Pink Guava Juice, Apple Juice, Mixed Fruit Juice, Mango Juice, Amla Juice, Pomegranate Juice, Cranberry Juice, Dry Fruit Apple Juice	Flavor and Taste	ITC-FBD/AOP/SENSORY-08 Issue. 01 Dated. 23-09-2015, ASTM E2139-05: 2011	Qualitative
		Overall Sensory Evaluation (After Reconstitution)		Qualitative
		Moisture	DGHS Manual 5, Page. 11 (2005)	10 % to 95 %
		Total Fat	IS 1163: 1992	0.01 % to 1 %
		Protein (N x 6.25)	IS 7219: 1973	1 % to 80 %
		Total Ash	DGHS Manual 5, Page. 39 (2005)	0.1 % to 2 %

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	Jamun Juice, Orange Juice, Pineapple Juice, Pink Guava Juice, Apple Juice, Mixed Fruit Juice, Mango Juice, Amla Juice, Pomegranate Juice, Cranberry Juice, Dry Fruit Apple Juice	Energy Kcal/100g	FAO Food and Nutrition Paper 77, (2003)	10 kcal to 90 kcal/100g
		Carbohydrates	FAO Food and Nutrition Paper 77, (2003)	1 % to 20 %
		Total Soluble Solids	DGHS Manual 5, Page. 5 (2005)	0.1 % to 40 %
		Total Sugars	DGHS Manual 5, Page. 16 (2005)	10 % to 50 %
D.	Orange Cells, Pomogranate Pulp, Jamun Pulp, Amla Pulp, Litchi Pulp, Mixed Fruit Concentrate, Pink Guava Pulp, Totapuri Mango Pulp, Alphanso Mango Pulp, Pineapple Juice Concentrate, Deionised Apple Juice Concentrate, Apple Juice Concentrate, Orange Juice Concentrate	Acidity	DGHS Manual 5, Page. 12 (2005)	0.1 % to 4 %
		pH	DGHS Manual 5, Page. 12 (2005)	1 % to 14
		Viscosity	ITC-FBD/AOP/Juices/FG-01/08, Brookefield viscometer	10 % to 10000 cps
		Specific Gravity	IS 2860: 1964	0.9 to 1.7
		Vitamin C	DGHS Manual 5 Page. 19 (2005)	2 mg/100g to 80 mg/100g
		Colour Value – Hunter Lab	ITC-FBD/AOP/Juices/FG-01/08	L = 1 units to 100 units a = 0.01 units to 100 units b = 1 units to 100 units
		Total Soluble Solids	DGHS Manual 5, Page. 5 (2005)	5 % to 80 %

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	Orange Cells, Pomogranate Pulp, Jamun Pulp, Amla Pulp, Litchi Pulp, Mixed Fruit Concentrate, Pink Guava Pulp, Totapuri Mango Pulp, Alphanso Mango Pulp, Pineapple Juice Concentrate, Deionised Apple Juice Concentrate, Apple Juice Concentrate, Orange Juice Concentrate	Acidity	DGHS Manual 5, Page. 12 (2005)	0.1 % to 4.0 %
		pH	DGHS Manual 5, Page. 12 (2005)	1 to 14
		Viscosity	ITC-FBD/AOP/Juices/RM-01/05, Brookfield viscometer	10 cps to 10000 cps
		Specific Gravity	IS 2860: 1964	0.9 to 1.7
		Colour Value-Hunter Lab	ITC-FBD/AOP/Juices/RM-01/07	L= 1 to 100 units, a = 0.01 % to 100 units, b = 1 to 100 units
		Hydrogen Cyanide	CQAL/INST/STP-79 Issue. 04, Dated. 20-08-2014	1 µg/kg to 300 µg/kg
		Hydrogen Phosphide	CQAL/INST/STP-80 Issue. 04, Dated. 20-08-2014	5 µg/kg to 300 µg/kg
		Inorganic Bromide	CQAL/INST/STP-81 Issue. 04, Dated. 25-11-2015	15 µg/kg to 300 µg/kg
		Oragnic Acids		
		Tartaric Acid	CQAL/INST/STP-34 Issue. 04, Dated. 20-08-2014	0.003 g/100 g to 1 g/100 g LOD: 0.0005 g/100 g
		Citric Acid		
		Malic Acid		
		Acetic Acid		
		Lactic Acid		

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E.	Fruit Juices And Concentrates	Vitamin K	CQAL/INST/STP-54 Issue. 04, Dated. 20-08-2014	2 µg/g to 2 g/100g LOD: 0.5 µg/g
		Vitamin B1	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	2 µg/g to 2 g/100g LOD: 0.5 µg/g
		Vitamin B2	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	2 µg/g to 2 g/100g LOD: 0.5 µg/g
		Vitamin B3	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	2 µg/g to 2 g/100g LOD: 0.5 µg/g

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	Fruit Juices And Concentrates	Vitamin B5	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	2 µg/g to 2 g/100g LOD: 0.5 µg/g
		Vitamin B6	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	2 µg/g to 2 g/100g LOD: 0.5 µg/g
		Folate	CQAL/INST/STP-53 Issue. 04, Dated. 20-08-2014	2 µg/g to 2 g/100g LOD: 0.5 µg/g
		Vitamin C	CQAL/INST/STP-52 Issue. 04, Dated. 20-08-2014	5 µg/g to 2 g/100g LOD: 2.0 µg/g
		Vitamin A Carotene	CQAL/INST/STP-54 Issue. 04, Dated. 20-08-2014	2 µg/g to 2 g/100g LOD: 0.5 µg/g
		Vitamin E	CQAL/INST/STP-54 Issue. 04, Dated. 20-08-2014	2 µg/g to 2 g/100g LOD: 0.5 µg/g
		Patulin	CQAL/INST/STP-84 Issue. 04, Dated. 20-08-2014	0.5 µg/kg to 2500 µg/kg LOD: 10 µg/kg
19.	Oil Seeds & By-Products			
A.	Hydrogenated Vegetable Oil (Vanaspati), Bakery Shortening	Moisture	IS 548 (Part 1): 1964; DGHS Manual 2, Page. 3 (2005)	0.01 % to 0.5 %
		Melting Point	DGHS Manual 2, Page. 20 (2005); IS 548 (Part 1): 1964	35°C to 50 °C
		Peroxide Value	IS 548 (Part 1): 1964	0.05 meq/kg to 3.0 meq/kg
		Free Fatty Acid (As Oleic Acid)	DGHS Manual 2, Page. 28 (2005); IS 548 (Part 1): 1964	0.01 % to 0.5 %

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	Hydrogenated Vegetable Oil (Vanaspati), Bakery Shortening	Unsaponifiable Matter	DGHS Manual 2, Page. 25 (2005); IS 548 (Part 1): 1964	0.01 % to 2.0 %
		Baudoin Test	IS 10633:1999	0.05 to 10.0
		Acid Value	DGHS Manual 2, Page. 28 (2005); IS 548 (Part 1): 1964	0.01 to 0.5
		Oxidative Stability	AOCS cd-12b-92 (6 th Edition): 2010	5 h to 60 h
B.	Palm Oil	Moisture	IS 548 (Part 1): 1964; DGHS Manual 2, Page. 3 (2005)	0.01 % to 0.5 %
		Free Fatty Acid (As Oleic Acid)	DGHS Manual 2, Page. 28 (2005); IS 548 (Part 1): 1964	0.01 % to 0.5 %
		Melting Point (Open Tube Capillary Slip Method)	DGHS Manual 2, Page. 20 (2005); IS 548 (Part 1): 1964	35-50°C
		Peroxide Value	IS 548 (Part 1): 1964	0.05-3.0 meq/kg
		Iodine Value	DGHS Manual 2, Page. 30 (2005), IS 548 (Part 1): 1964	30 to 70
		Saponification Value	DGHS Manual 2, Page. 22 (2005), IS 548 (Part 1): 1964	160 to 250
		Unsaponifiable Matter	DGHS Manual 2, Page. 25 (2005), IS 548 (Part 1): 1964	0.01 % to 2.0 %
		Acid Value	DGHS Manual 2, Page. 28 (2005); IS 548 (Part 1): 1964	(0.01 mg to 0.5 mg) of KOH/g

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	Palm Oil	Mineral Oil	IS 548 (Part 2): 1976	Qualitative (Presence/Absence)
		Oxidative Stability	AOCS (6 th Edition) cd-12b-92: 2010	5.0 h to 60.0 h
		Colour Value	IS 548 (Part 1): 1964	1 to 20
		Refractive Index	IS 548 (Part I): 1964; DGHS Manual 2, Page. 6 (2005)	1.4 to 1.5
		p-Anisidine Value	AOCS (6 th Edition) cd 18-90: 2010	0.1 to 60
		Test For Presence of Sesame Oil	IS 548 (Part 1): 1964	Qualitative (Present/Absent)
		TBHQ by MBTH Method	ITC-FBD/AOP/BS/RM-54/14 Issue. 03 Dated. 3-05-2011	20 mg/l to 250 mg/l
C.	Palmolein Oil	Moisture	IS 548 (Part 1): 1964; DGHS Manual 2, Page. 3 (2005)	0.01 % to 0.5 %
		Free Fatty Acid (As Oleic Acid)	DGHS Manual 2, Page. 28 (2005); IS 548 (Part 1): 1964	0.01 % to 0.5 %
		Peroxide Value	IS 548 (Part 1): 1964	0.05 meq/kg to 3.0 meq/kg
		Iodine Value	DGHS Manual 2, Page. 30 (2005), IS 548 (Part 1): 1964	30 to 70

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	Palmolein Oil	Saponification Value	DGHS Manual 2, Page. 22 (2005); IS 548 (Part 1): 1964	160 to 250
		Unsaponifiable Matter	DGHS Manual 2, Page. 25 (2005); IS 548 (Part 1): 1964	0.01 % to 2.0 %
		Cloud Point	DGHS Manual 2, Page. 46 (2005), IS 548 (Part 1): 1964	5.0 °C to 20.0 °C
		Mineral Oil	IS 548 (Part 2): 1976; DGHS Manual 2, Page. 76	Qualitative (Presence/Absence)
		Refractive Index At 40°C	IS 548 (Part 2): 1976; DGHS Manual 2, Page. 6 (2005)	1.4 to 1.5
		Phosphorus Content	IUPAC 2.421	3 mg/l to 25 mg/l
	D. Hydrogenated Coconut Oil	Acid Value	DGHS Manual 2, Page. 28 (2005); IS 548 (Part 1): 1964	0.01 mg to 0.5 mg of KOH/g
		Mineral Oil	IS 548 (Part 2): 1976; DGHS Manual 2, Page. 76 (2005)	Qualitative
		Oxidative Stability	AOCS (6 th Edition) cd-12b-92: 2010	5.0 to 60.0
		Moisture	IS 548 (Part 1): 1964; DGHS Manual 2, Page. 3 (2005)	0.01 % to 0.5 %
		Melting Point	DGHS Manual 2, Page. 20 (2005); IS 548 (Part 1): 1964	35 °C to 50 °C

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E.	Hydrogenated Coconut Oil	Peroxide Value	IS 548 (Part 1): 1964	0.05 meq/kg to 3.0 meq/kg
		Free Fatty Acid (As Oleic Acid)	DGHS Manual 2, Page. 28 (2005); IS 548 (Part 1): 1964	0.01 % to 0.5 %
		Baudoin Test	IS 10633: 1999	0.05 to 10.0
	Vanaspati (Special HVO)	Unsaponifiable Matter	DGHS Manual 2, Page. 25 (2005); IS 548 (Part 1): 1964	0.01 % to 2.0 %
		Mineral Oil	IS 548 (Part 2): 1976; DGHS Manual 2, Page. 76 (2005)	Qualitative (Presence/Absence)
		Appearance	IS 10633: 1999	Qualitative
		Colour	IS 10633: 1999	Qualitative
		Moisture	IS 548 (Part 1): 1964; DGHS Manual 2, Page. 3 (2005)	0.01 % to 0.5 %
		Free Fatty Acid (As Oleic Acid)	IS 548 (Part 1): 1964; DGHS Manual 2, Page. 3 (2005)	0.01 % to 0.5 %
		Acid Value	DGHS Manual 2, Page. 28 (2005); IS 548 (Part 1): 1964	0.01 to 0.5
		Melting Point	DGHS Manual 2, Page. 20 (2005); IS 548 (Part 1): 1964	35 °C to 50 °C

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F.	Vanaspati (Special HVO)	Peroxide Value	IS 548 (Part 1): 1964	0.05 meq/kg to 3.0 meq/kg
		Solid Fat Content (35°C)	AOCS Cd 16b-81 (6 th Edition): 2010	1% to 20 %
		Solid Fat Content (40°C)	AOCS Cd 16b-81 (6 th Edition): 2010	1 % to 10 %
		Oxidative Stability	AOCS cd-12b-92 (6 th Edition): 2010	5 h to 60 h
	Hydrogenated Palm Kernel Oil	Colour	IS 10633: 1999	Qualitative
		Odour and Taste	IS 10633: 1999	Qualitative
		Moisture Content	IS 548 (Part 1): 1964; DGHS Manual 2, Page. 3 (2005)	0.01 % to 0.5 %
		Melting Point	DGHS Manual 2, Page. 20 (2005); IS 548 (Part 1): 1964	33 °C to 36 °C
		Free Fatty Acid as Oleic Acid	IS 548 (Part 1): 1964; DGHS Manual 2, Page. 3 (2005)	0.01 % to 0.1 %
		Oxidative Stability	AOCS cd-12b-92 (6 th Edition): 2010	5 h to 60 h
		Peroxide Value	IS 548 (Part 1): 1964	0.05 meq/kg to 3.0 meq/kg
		Solid Fat Content (35°C)	AOCS Cd 16b-81 (6 th Edition): 2010	1 % to 20 %

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	Hydrogenated Palm Kernel Oil	Solid Fat Content (40°C)	AOCS Cd 16b-81 (6 th Edition): 2010	1 % to 10 %
G.	Carnauba Wax	Peroxide Value	IS 548 (Part 1): 1964	0.5 to 1
		Acid Value	Food Chemical Codex V Ed	1.0 to 10
H.	Poly Glycerol Poly Ricinoleate	Melting Range	DGHS Manual 2, Page. 20 (2005); IS 548 (Part 1): 1964, USP 31- F/26 2008 Page. 1259	80 °C to 86 °C
		Acid Value	Food Chemical Codex, V Ed, IS 548 (Part 1): 1964	1 mg to 8 mg of KOH/g
		Iodine Value	DGHS Manual 2, Page. 30 (2005), IS 548 (Part 1): 1964	72 to 100
I.	Miglyol 812N	Moisture Content by Karl Fischer	IS 2362: 1993	0 to 1 %
		Acid Value	DGHS Manual 2, Page. 28 (2005); IS 548 (Part 1): 1964	0.05 to 1
		Refractive Index	IS 548 (Part 2): 1976; DGHS Manual 2, Page. 6 (2005)	1.31 to 1.9
		Specific Gravity	IS 548 (Part 2): 1976	0.1 to 1

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J.	Hydrogenated Vegetable Oil, Bakery Shortening, Palm Oil, Palmolein Oil, Hydrogenated Coconut Oil (HCNO), Special Hydrogenated Vegetable Oil, Hydrogenated Palm Kernel Oil (HPKO), Carnauba Wax, Poly Glycerol Poly Ricinoleate (PGPR), Miglyol 812N	Saturated Fatty Acid	CQAL/INST/STP-07 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 996.06: 2012	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Mono Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Poly Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Total Trans Fatty Acid	CQAL/INST/STP-36 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 996.06: 2012	0.03 g/100g to 25 g/100g LOD: 0.01 g/100g
		Cholesterol	CQAL/INST/STP-24 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 994.10: 2012	0.001 g/100g to 1 g/100g LOD: 0.001 g/100g
K.	Oils And Fats	Tertiary Butyl Hydro Quinone (TBHQ)	CQAL/INST/STP-02 AOAC (19 th Edition) 983.15: 2012	10 mg/kg to 10000 mg/kg LOD: 3 mg/kg
		Butylated Hydroxy Anisole (BHA)	Issue. 04, Dated. 20-08-2014	
20.	Meat And Meat Products			
A.	Dehydrated Chicken	Moisture	IS 5960 (Part 5): 1970	1.0 % to 8.0 %
		Total Fat	IS 5960 (Part 3): 1970, DGHS Manual 6 Page. 21 (2005)	1% to 25 %

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	Dehydrated Chicken	Rehydration Ratio	DGHS Manual 5, Page. 51 (2005)	1 to 4.0
		Protein (N x 6.25)	IS 5960 (Part 3): 1970, DGHS Manual 6 Page. 22 (2005)	20 % to 60 %
		Salt as NaCl	IS 5960 (Part 6 / Sec I): 1970	2 % to 10 %
		Free Fatty Acid Oleic Acid	IS 548 (Part 1): 1964	0.1 % to 1.0 %
		Bulk Density	IS 16033: 2012	0.10 g/cc to 1.0 g/cc
		Particle Size (L)	ITC-FBD/AOP/RTE/FG-13/07 Issue. 02, Dated. 20-10-2014	1 mm to 20 mm
		Particle Size (W)	ITC-FBD/AOP/RTE/FG-13/07 Issue. 02, Dated. 20-10-2014	1 mm to 10 mm
B.	Chicken Fat	Moisture	IS 548 (Part 1): 1964	0.01 % to 0.5 %
		Free Fatty Acid As Oleic Acid	IS 548 (Part 1): 1964	0.1 % to 2 %
		Peroxide Value	IS 548 (Part 1): 1964	0.1 to 2
C.	Non Veg Ready Meals (Gravy)	Total Soluble Solids	IS 5861: 1993	1 % to 20 %
		Total Acidity	DGHS Manual 5, Page. 12 (2005)	0.1 % to 10 %
		Salt as NaCl as NaCl	DGHS Manual 5, Page. 12 (2005)	0.2 % to 5.0 %

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	Non Veg Ready Meals (Gravy)	pH	DGHS Manual 5, Page. 12 (2005)	1.0 to 14.0
		Water Activity	AOAC (19 th Edition) 978.18: 2012	0.1 to 1.0
		Proportion Of Gravy To Meat	IS 3044: 1973	20 g to 100 g meat 1: 5 ratio
D.	Dehydrated Chicken, Non-Veg Ready Meals, Chicken Fat	Saturated Fatty Acid	CQAL/INST/STP-07 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 996.06: 2012	0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Mono Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Poly Unsaturated Fatty Acid		0.3 g/100g to 50.0 g/100g LOD: 0.1 g/100g
		Total Trans Fatty Acid	CQAL/INST/STP-36 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 996.06: 2012	0.03 g/100g to 20 g/100g LOD: 0.01 g/100g
		Cholesterol	CQAL/INST/STP-24 AOAC (994.10) Issue. 04, Dated. 20-08-2014	0.001 g/100g to 1 g/100g LOD: 0.001 g/100g

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21.	Other			
A.	Sensory Evaluation			
a.	Chapati, Bakery & Confectionery Products, Fruits & Vegetable Products, Milk & Dairy Products, Coffee, Chocolates, Honey, Spices & Condiments, Fruit Juices, Convenience Foods, Ready-To-Eat Foods, Food Flavors, Food Colours, Noodles, Pasta, Potato Chips & Namkeens	Detection Threshold/Stimulus Threshold	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, IS 8140: 1978	Qualitative
		Difference Threshold	ASTM (2 nd Edition): 1996 - Sensory Testing Methods,	Qualitative
		Recognition Threshold	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, IS 6273 (Part 1): 1971 IS 10641: 1983	Qualitative
		Simple Descriptive Test	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, ISO 6658: 2005	Qualitative
		Paired Comparison	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, IS 6273 (Part 3, Sec 1): 1971, ISO 5495: 2005	Qualitative
		Triangle Test	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, IS 6273 (Part 3/Sec I): 1971	Qualitative
		Intensity Ranking	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, IS 6273 (Part 3/Sec I): 1971	Qualitative
		Flavour Profiling	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, IS 15315: 2009	Qualitative

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	Chapati, Bakery & Confectionery Products, Fruits & Vegetable Products, Milk & Dairy Products, Coffee, Chocolates, Honey, Spices & Condiments, Fruit Juices, Convenience Foods, Ready-To-Eat Foods, Food Flavors, Food Colours, Noodles, Pasta, Potato Chips & Namkeens	Texture Profiling	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, ISO 12036: 1994	Qualitative
		Quantitative Descriptive Analysis	ASTM 1996 - Sensory Testing Methods, ISO 13299: 2005 ISO 4121: 2003	Qualitative
		Time Intensity Study	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, ASTM E 1909: 1997	Qualitative
		Hedonic Tests	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, IS 6273 (Part 3/Sec I): 1971	Qualitative
		Paired Difference	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, IS 6273 (Part 3/Sec I): 1971 ISO 5495: 2005	Qualitative
		Duo-Trio Test	ASTM (2 nd Edition): 1996 - Sensory Testing Methods, IS 6273 (Part 3/Sec I): 1971	Qualitative
		Rating Scale Test	ASTM (2 nd Edition): 1996 Sensory Testing Methods, IS 6273 (Part 11): 1971	Qualitative
		Preference Ranking	ASTM (2 nd Edition): 1996 - Sensory Testing Methods,	Qualitative

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II.	RESIDUES IN FOOD PRODUCTS			
1.	Biscuits, Bread Thin Crust Pizza Base, Frozen Tortilla Wrap, Cakes	Mycotoxins Aflatoxins B1, B2, G1, G2	CQAL/INST/STP-42 Issue. 03, Dated. 20-08-2014	2.0 µg/kg to 1000 µg/kg LOD: 0.5 µg/kg
		Trace metal elements Lead	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012	0.3 mg/kg to 5000 mg/kg LOD: 0.1 mg/kg
		Arsenic	Issue. 04, Dated. 20-08-2014	0.3 mg/kg to 10 mg/kg LOD: 0.1 mg/kg
		Tin		1.2 mg/kg to 2000 mg/kg LOD: 0.6 mg/kg
		Cadmium	CQAL/INST/STP-38 Issue. 04, Dated. 20-08-2014	0.3 mg/kg to 2000 mg/kg LOD: 0.1 mg/kg
		Mercury	CQAL/INST/STP-40 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg
		Pesticides Carbofuran	CQAL/INST/STP-55 Issue. 04, Dated. 20/08/2014	10 µg/kg to 300 µg/kg
		Chlorobenzilate	AOAC (19 th Edition) 2007.01: 2012	10 µg/kg to 300 µg/kg
		ChlorfenvinPhos	QuEChERS	10 µg/kg to 300 µg/kg
		Chlorpyrifos		10 µg/kg to 300 µg/kg
		Diazinon		10 µg/kg to 300 µg/kg
		Dichlorvos		10 µg/kg to 300 µg/kg

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	Biscuits, Bread Thin Crust Pizza Base, Frozen Tortilla Wrap, Cakes	Dimethoate	CQAL/INST/STP-55 Issue. 04, Dated. 20/08/2014 AOAC (19 th Edition) 2007.01: 2012 QuEChERS	10 µg/kg to 300 µg/kg
		Ethion		10 µg/kg to 300 µg/kg
		EdifenPhos		10 µg/kg to 300 µg/kg
		Fenitrothion		10 µg/kg to 300 µg/kg
		Fenthion		10 µg/kg to 300 µg/kg
		Fosetyl-Al	CQAL/INST/STP-56 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 2007.01: 2012, QuEChERS	10 µg/kg to 300 µg/kg
		Monocrotophos		10 µg/kg to 300 µg/kg
		2, 4 – D		10 µg/kg to 300 µg/kg
		Aldrin		10 µg/kg to 300 µg/kg
		Benomyl (As Carbendazim)		10 µg/kg to 300 µg/kg
		Carbaryl		10 µg/kg to 300 µg/kg
		Carbendazim		10 µg/kg to 300 µg/kg
		α– Endosulphan		10 µg/kg to 300 µg/kg
		β– Endosulphan		10 µg/kg to 300 µg/kg
		Endosulphan Sulphate		10 µg/kg to 300 µg/kg
		Fenvalerate		10 µg/kg to 300 µg/kg
		Heptachlor		10 µg/kg to 300 µg/kg

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	Biscuits, Bread Thin Crust Pizza Base, Frozen Tortilla Wrap, Cakes	α - Hexa Chloro Cyclohexane	CQAL/INST/STP-56 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 2007.01: 2012, QuEChERS	10 µg/kg to 1000 µg/kg
		β – Hexa Chloro Cyclohexane		10 µg/kg to 300 µg/kg
		γ - Hexa Chloro Cyclohexane		10 µg/kg to 300 µg/kg
		δ – Hexa Chloro Cyclohexane		10 µg/kg to 300 µg/kg
		Malathion		10 µg/kg to 300 µg/kg
		Mancozeb as Dithiocarbamate		10 µg/kg to 300 µg/kg
		Phorate		10 µg/kg to 300 µg/kg
		Chlordane		10 µg/kg to 300 µg/kg
		Cypermethrin		10 µg/kg to 300 µg/kg
		DDT and its Isomers		10 µg/kg to 300 µg/kg
		Deltamethrin	CQAL/INST/STP-55 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 2007.01: 2012 QuEChERS	10 µg/kg to 300 µg/kg
		Dicofol		10 µg/kg to 300 µg/kg
		Dithiocarbamate		10 µg/kg to 300 µg/kg
		Paraquat Dichloride		10 µg/kg to 300 µg/kg
		Phenthoate		10 µg/kg to 300 µg/kg
		Phoshamidon		10 µg/kg to 300 µg/kg
		Pirimiphos – Methyl		10 µg/kg to 300 µg/kg

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	Biscuits, Bread Thin Crust Pizza Base, Frozen Tortilla Wrap, Cakes	Quinolphos	CQAL/INST/STP-55 Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Thiometon	AOAC (19 th Edition) 2007.01: 2012 QuEChERS	10 µg/kg to 300 µg/kg
		Trichlorfon		10 µg/kg to 300 µg/kg
		Triazophos		10 µg/kg to 300 µg/kg
		Hydrogen Cyanide	CQAL/INST/STP-79 Issue. 04, Dated. 25-11-2015	1 µg/kg to 300 µg/kg
		Hydrogen Phosphide	CQAL/INST/STP-80 Issue. 04, Dated. 25-11-2015	5 µg/kg to 300 µg/kg
		Inorganic Bromide	CQAL/INST/STP-81 Issue. 04, Dated. 25-11-2015	10 µg/kg to 300 µg/kg
		Texture – Hardness	CQAL/INST/STP-48 Issue. 04, Dated. 20-08-2014	400 g to 6500 g LOD: 20 g
2.	Hard Boiled Confectionery, Toffees, Lozenges, Jellicious, Chewing Gum	Mycotoxins		
		Aflatoxins B1, B2, G1, G2	CQAL/INST/STP-42 Issue. 03, Dated. 20-08-2014	2.0 µg/kg to 1000 µg/kg LOD: 0.1 µg/kg
		Trace metal elements		
		Lead	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012	0.3 mg/kg to 5000 mg/kg LOD: 0.1 mg/kg
		Copper	Issue. 04, Dated. 20-08-2014	0.6 mg/kg to 2000 mg/kg LOD: 0.2 mg/kg

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	Hard Boiled Confectionery, Toffees, Lozenges, Jellicious, Chewing Gum	Arsenic	CQAL/INST/STP-39 AOAC (19 th Edition) 999.10: 2012	0.3 mg/kg to 10 mg/kg LOD: 0.1 mg/kg
		Zinc	Issue. 03, Dated. 20-08-2014	1 mg/kg to 20000 mg/kg LOD: 0.6 mg/kg
		Tin		1.0 mg/kg to 2000 mg/kg LOD: 0.6 mg/kg
		Cadmium		0.8 mg/kg to 2000 mg/kg LOD: 0.3 mg/kg
		Mercury	CQAL/INST/STP-40 Issue. 04, Dated. 20-08-2014	0.3 mg/kg to 10 mg/kg LOD: 0.1 mg/kg
		Pesticides		
		Benomyl	CQAL/INST/STP-55 AOAC (19 th Edition) 2007.01: 2012, QuEChERS	10 µg/kg to 300 µg/kg
		Buprofezin	Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Butachlor		10 µg/kg to 300 µg/kg
		Carbaryl		10 µg/kg to 300 µg/kg
		Carbendazim		10 µg/kg to 300 µg/kg
		Carbofuran		10 µg/kg to 300 µg/kg
		Carbosulfan		10 µg/kg to 300 µg/kg
		Carpropamid		10 µg/kg to 300 µg/kg
		Cartap Hydrochloride		10 µg/kg to 300 µg/kg

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	Hard Boiled Confectionery, Toffees, Lozenges, Jellicious, Chewing Gum	ChlorfenvinPhos	CQAL/INST/STP-55 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Chlorobenzilate		10 µg/kg to 300 µg/kg
		Clomazone		10 µg/kg to 300 µg/kg
		Cyhalop – Butyl		10 µg/kg to 300 µg/kg
		Chlordane		10 µg/kg to 300 µg/kg
		2, 4 – D		10 µg/kg to 300 µg/kg
		Alachlor		10 µg/kg to 300 µg/kg
		Anilophos		10 µg/kg to 300 µg/kg
		Atrazine		10 µg/kg to 300 µg/kg
		Benfuracarb		10 µg/kg to 300 µg/kg
		Dichlorvos		10 µg/kg to 300 µg/kg
		Dimethoate		10 µg/kg to 300 µg/kg
		Diuron		10 µg/kg to 300 µg/kg
		Edifenphos		10 µg/kg to 300 µg/kg
		Ethephon		10 µg/kg to 300 µg/kg
		Ethion		10 µg/kg to 300 µg/kg
		Ethoxysulfuron		10 µg/kg to 300 µg/kg

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	Hard Boiled Confectionery, Toffees, Lozenges, Jellicious, Chewing Gum	Fenitrothion	CQAL/INST/STP-55 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Fenobucarb		10 µg/kg to 300 µg/kg
		Fenthion		10 µg/kg to 300 µg/kg
		Flufanacet		10 µg/kg to 300 µg/kg
		Formothion		10 µg/kg to 300 µg/kg
		Imidacloprid		10 µg/kg to 300 µg/kg
		Kitazin		10 µg/kg to 300 µg/kg
		Malathion		10 µg/kg to 300 µg/kg
		Metalaxyl		10 µg/kg to 300 µg/kg
		MCPA (2-Methyl-4-ChloroPhenoxyacetic Acid)		10 µg/kg to 300 µg/kg
		Monocrotophos		10 µg/kg to 300 µg/kg
		Oxadiargyl		10 µg/kg to 300 µg/kg
		Oxyflourfen		10 µg/kg to 300 µg/kg
		Paraquat Dichloride		10 µg/kg to 300 µg/kg
		Pendimethalin		10 µg/kg to 300 µg/kg
		Phenthoate		10 µg/kg to 300 µg/kg
		Phorate		10 µg/kg to 300 µg/kg

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	Hard Boiled Confectionery, Toffees, Lozenges, Jellicious, Chewing Gum	Phosalone	CQAL/INST/STP-55 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Phosphamidon		10 µg/kg to 300 µg/kg
		PirimiPhos – Methyl		10 µg/kg to 300 µg/kg
		Pretilachlor		10 µg/kg to 300 µg/kg
		Pyrazosulfuron Ethyl		10 µg/kg to 300 µg/kg
		Quinalphos		10 µg/kg to 300 µg/kg
		Simazine		10 µg/kg to 300 µg/kg
		Thiamethoxam		10 µg/kg to 300 µg/kg
		Thiocloprid		10 µg/kg to 300 µg/kg
		Thiometon		10 µg/kg to 300 µg/kg
		TriazoPhos		10 µg/kg to 300 µg/kg
		Trichlorfon		10 µg/kg to 300 µg/kg
		Tricyclazole		10 µg/kg to 300 µg/kg
		Tridemorph		10 µg/kg to 300 µg/kg
		Aldrin	CQAL/INST/STP-56 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 14-07-2014	10 µg/kg to 300 µg/kg
		Chlorpyrifos		10 µg/kg to 300 µg/kg
		Copper Oxychloride		10 µg/kg to 300 µg/kg

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	Hard Boiled Confectionery, Toffees, Lozenges, Jellicious, Chewing Gum	DDT & Its Isomers	CQAL/INST/STP-56 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 14-07-2014	10 µg/kg to 300 µg/kg
		Dicofol		10 µg/kg to 300 µg/kg
		Dithiocarbamate		10 µg/kg to 300 µg/kg
		α – Endosulphan		10 µg/kg to 300 µg/kg
		Endosulphan Sulphate		
		Ethofenprox		10 µg/kg to 300 µg/kg
		Fenvalerate		10 µg/kg to 300 µg/kg
		Heptachlor		10 µg/kg to 300 µg/kg
		Hexachlorocyclohexane		10 µg/kg to 300 µg/kg
		Iprodione		10 µg/kg to 300 µg/kg
		Isoprothiolane		10 µg/kg to 300 µg/kg
		Parathion – Methyl		10 µg/kg to 300 µg/kg
		Propineb as Dithiocarbamate		10 µg/kg to 300 µg/kg
		Pyrethrins		10 µg/kg to 300 µg/kg
		Hydrogen Cyanide	CQAL/INST/STP-79 Issue. 04, Dated. 25-11-2015	1 µg/kg to 300 µg/kg
		Hydrogen Phosphide		5 µg/kg to 300 µg/kg

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	Hard Boiled Confectionery, Toffees, Lozenges, Jellicious, Chewing Gum	Inorganic Bromide	CQAL/INST/STP-81 Issue. 04, Dated. 25-11-2015	10 µg/kg to 300 µg/kg
3.	Potato Chips, Namkeens	Mycotoxins Aflatoxins B1, B2, G1, G2	CQAL/INST/STP-42 Issue. 03, Dated. 20-08-2014	2.0 µg/kg to 1000 µg/kg LOD: 0.5 µg/kg
		Trace metal elements Lead	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.3 mg/kg to 1000 mg /kg LOD: 0.1 mg/kg
		Copper	CQAL/INST/STP-39 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 µg/kg to 1000 µg /kg LOD: 0.6 µg /kg
		Arsenic	Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.3 mg/kg
		Tin		1.2 µg/kg to 1000 µg/kg LOD: 0.6 µg/kg
		Cadmium		0.8 µg/kg to 1000 µg/kg LOD: 0.3 µg/kg
		Mercury	CQAL/INST/STP-40 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg

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	Potato Chips, Namkeens	Clomazone	CQAL/INST/STP-55 AOAC (2007.01) QuEChERS Issue. 01, Dated. 14-07-2014	10 µg/kg to 300 µg/kg
		Cyhalofop – Butyl		10 µg/kg to 300 µg/kg
		Diazinon		10 µg/kg to 300 µg/kg
		Dichlorvos		10 µg/kg to 300 µg/kg
		Diclofop – Methyl		10 µg/kg to 300 µg/kg
		Dimethoate		10 µg/kg to 300 µg/kg
		Dimethomorph		10 µg/kg to 300 µg/kg
		EdifenPhos		10 µg/kg to 300 µg/kg
		EthePhon		10 µg/kg to 300 µg/kg
		Ethion		10 µg/kg to 300 µg/kg
		Fenitrothion		10 µg/kg to 300 µg/kg
		Fenobucarb		10 µg/kg to 300 µg/kg
		Fenoxo – Prop – Ethyl		10 µg/kg to 300 µg/kg
		Fenthion		10 µg/kg to 300 µg/kg
		Flufenacet		10 µg/kg to 300 µg/kg
		Formothion		10 µg/kg to 300 µg/kg
		Imidachloprid		10 µg/kg to 300 µg/kg

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	Potato Chips, Namkeens	Isoproturon	CQAL/INST/STP-55 AOAC (2007.01), QuEChERS Issue. 01, Dated. 14-07-2014	10 µg/kg to 300 µg/kg
		Kitazin		10 µg/kg to 300 µg/kg
		Malic Hydrazide		10 µg/kg to 300 µg/kg
		Metalaxyl		10 µg/kg to 300 µg/kg
		Metasulfuron – Methyl		10 µg/kg to 300 µg/kg
		Methabenzthiazuron		10 µg/kg to 300 µg/kg
		Pyrazosulfuron Ethyl		10 µg/kg to 300 µg/kg
		QuinoPhos		10 µg/kg to 300 µg/kg
		Simazine		10 µg/kg to 300 µg/kg
		Sufosulfuron		10 µg/kg to 300 µg/kg
		Tebuconazole		10 µg/kg to 300 µg/kg
		Thiamethoxam		10 µg/kg to 300 µg/kg
		Thiochlorid		10 µg/kg to 300 µg/kg
		Thiometon		10 µg/kg to 300 µg/kg
		Triadimenol		10 µg/kg to 300 µg/kg
		Triallate		10 µg/kg to 300 µg/kg
		Triazophos		10 µg/kg to 300 µg/kg

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	Potato Chips, Namkeens	Trichlorfon	CQAL/INST/STP-55 AOAC (2007.01), QuEChERS Issue. 01, Dated. 14-07-2014	10 µg/kg to 300 µg/kg
		Tricyclazole		10 µg/kg to 300 µg/kg
		Tridemorph		10 µg/kg to 300 µg/kg
		Captafol		10 µg/kg to 300 µg/kg
		Methyl Chloro Phenoxy Acetic Acid (MCPA)		10 µg/kg to 300 µg/kg
		Monocrotophos		10 µg/kg to 300 µg/kg
		Oxadiargyl		10 µg/kg to 300 µg/kg
		Oxuflofen		10 µg/kg to 300 µg/kg
		Paraquat Dichloride		10 µg/kg to 300 µg/kg
		Pretilachlor		10 µg/kg to 300 µg/kg
		Phenthoate		10 µg/kg to 300 µg/kg
		Phosphamidon		10 µg/kg to 300 µg/kg
		PirimiPhos Methyl		10 µg/kg to 300 µg/kg
		Propiconazole		10 µg/kg to 300 µg/kg
		Chlorothalonil		10 µg/kg to 300 µg/kg
		Chlorpyrifos		10 µg/kg to 300 µg/kg
		Copper Oxy Chloride		10 µg/kg to 300 µg/kg
		Cypermethrin		10 µg/kg to 300 µg/kg

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	Potato Chips, Namkeens	Parathion	CQAL/INST/STP-56 AOAC (2007.01), QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Parathion Methyl		10 µg/kg to 300 µg/kg
		Phorate		10 µg/kg to 300 µg/kg
		Propineb As Dithiocarbamate		10 µg/kg to 300 µg/kg
		Pyrethrins		10 µg/kg to 300 µg/kg
		Trifluralin		10 µg/kg to 300 µg/kg
		Iprodione		10 µg/kg to 300 µg/kg
		Isprothiolane		10 µg/kg to 300 µg/kg
		Malathion		10 µg/kg to 300 µg/kg
		Mancozeb As Dithiocarbamate		10 µg/kg to 300 µg/kg
		Metiram Isomer As Dithiocarbamate		10 µg/kg to 300 µg/kg
		DDT & Its Isomers		10 µg/kg to 300 µg/kg
		Decamethrin		10 µg/kg to 300 µg/kg
		Dicofol		10 µg/kg to 300 µg/kg
		Dithiocarbamate		10 µg/kg to 300 µg/kg
		α- Endosulphan		10 µg/kg to 300 µg/kg
		β – Endosulphan		10 µg/kg to 300 µg/kg

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	Potato Chips, Namkeens	Endosulphan Sulphate	CQAL/INST/STP-56 AOAC (2007.01), QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Ethofenprox		10 µg/kg to 300 µg/kg
		Fenvalerate		10 µg/kg to 300 µg/kg
		Heptachlor		10 µg/kg to 300 µg/kg
		α – Hexa Chloro Cyclohexane		10 µg/kg to 300 µg/kg
		β – Hexa Chloro Cyclohexane	CQAL/INST/STP-79 Issue. 04, Dated. 20-08-2014	
		γ – Hexa Chloro Cyclohexane		
		δ – Hexa Chloro Cyclohexane		
		Hydrogen Cyanide		1 µg/kg to 300 µg/kg
		Hydrogen Phosphide	CQAL/INST/STP-80 Issue. 04, Dated. 20-08-2014	5 µg/kg to 300 µg/kg
	4. Potato Chips	Inorganic Bromide	CQAL/INST/STP-81 Issue. 04, Dated. 25-11-2015	10 µg/kg to 300 µg/kg
		Pesticides		
		2, 4 – D	CQAL/INST/STP-55 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 01, Dated. 14-07-2014	10 µg/kg to 300 µg/kg
		Alachlor		10 µg/kg to 300 µg/kg
		Aldicarb		10 µg/kg to 300 µg/kg

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5.	Namkeens	Aldrin	CQAL/INST/STP-55 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 01, Dated. 14-07-2014	10 µg/kg to 300 µg/kg
		Anilophos		10 µg/kg to 300 µg/kg
		Atrazine		10 µg/kg to 300 µg/kg
		Benfuracarb		10 µg/kg to 300 µg/kg
		Benomyl		10 µg/kg to 300 µg/kg
		Bitertanol		10 µg/kg to 300 µg/kg
		Buprofezin		10 µg/kg to 300 µg/kg
		Butachlor		10 µg/kg to 300 µg/kg
		Carbaryl		10 µg/kg to 300 µg/kg
		Carbendazim		10 µg/kg to 300 µg/kg
		Carbofuran		10 µg/kg to 300 µg/kg
		Carbosulfan		10 µg/kg to 300 µg/kg
		Carpropamid		10 µg/kg to 300 µg/kg
		Cartap Hydrochloride		10 µg/kg to 300 µg/kg
		Chlordane		10 µg/kg to 300 µg/kg
		Chlorfenvinphos		10 µg/kg to 300 µg/kg
		Chlorimuron – Ethyl		10 µg/kg to 300 µg/kg
		Chlodinafop – Propanyl		10 µg/kg to 300 µg/kg

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6.	Gulab Jamun Mix Rice Dosa Mix Rice Idli Mix Rava Idli Mix	Trace metal elements		
		Lead	CQAL/INST/STP-38 AOAC (999.10) Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Copper		0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Tin		1.2 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Zinc		1.0 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Cadmium	CQAL/INST/STP-38 AOAC (999.10) Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Nickel		0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Arsenic	CQAL/INST/STP-39 AOAC (999.10) Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.3 mg/kg
		Mercury	CQAL/INST/STP-40 AOAC (999.10) Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg
		Pesticides		
		2, 4 – D	CQAL/INST/STP-55 AOAC (2007.01), QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Aldicarb		10 µg/kg to 300 µg/kg
		AniloPhos		10 µg/kg to 300 µg/kg

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	Gulab Jamun Mix	Atrazine	CQAL/INST/STP-55 AOAC (2007.01), QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
	Rice Dosa Mix	Benfuracarb		10 µg/kg to 300 µg/kg
	Rice Idli Mix	Flufenacet		10 µg/kg to 300 µg/kg
	Rava Idli Mix	Fosetyl – Al		10 µg/kg to 300 µg/kg
		Imidacloprid		10 µg/kg to 300 µg/kg
		Kitazin		10 µg/kg to 300 µg/kg
		Ethoxysulfuron		10 µg/kg to 300 µg/kg
		Fenitrothion		10 µg/kg to 300 µg/kg
		Fenobucarb		10 µg/kg to 300 µg/kg
		Fenthion		10 µg/kg to 300 µg/kg
		Diuron		10 µg/kg to 300 µg/kg
		EdifenPhos		10 µg/kg to 300 µg/kg
		EthePhon		10 µg/kg to 300 µg/kg
		Ethion		10 µg/kg to 300 µg/kg
		Benomyl (As Carbendazim)		10 µg/kg to 300 µg/kg
		Buprofezin		10 µg/kg to 300 µg/kg
		Butachlor		10 µg/kg to 300 µg/kg

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	Gulab Jamun Mix	Carbaryl	CQAL/INST/STP-55	10 µg/kg to 300 µg/kg
	Rice Dosa Mix	Carbendazim	AOAC (2007.01), QuEChERS	10 µg/kg to 300 µg/kg
	Rice Idli Mix		Issue. 04, Dated. 20-08-2014	
	Rava Idli Mix	Carbofuran		10 µg/kg to 300 µg/kg
		Carbosulfan		10 µg/kg to 300 µg/kg
		Carpropamid		10 µg/kg to 300 µg/kg
		Cartap Hydrochloride		10 µg/kg to 300 µg/kg
		Chlorobenzilate		10 µg/kg to 300 µg/kg
		ChlorofenvinPhos		10 µg/kg to 300 µg/kg
		Clomazone		10 µg/kg to 300 µg/kg
		Cyhalofop – Butyl		10 µg/kg to 300 µg/kg
		Diazinon		10 µg/kg to 300 µg/kg
		Dichlorvos		10 µg/kg to 300 µg/kg
		Dimethomorph		10 µg/kg to 300 µg/kg
		Dimethoate		10 µg/kg to 300 µg/kg
		Pretilachlor		10 µg/kg to 300 µg/kg
		Pyrazosulfuron – Ethyl		10 µg/kg to 300 µg/kg
		Quinalphos		10 µg/kg to 300 µg/kg

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	Gulab Jamun Mix	Simazine	CQAL/INST/STP-55	10 µg/kg to 300 µg/kg
	Rice Dosa Mix	Thiamethoxam	AOAC (2007.01), QuEChERS	10 µg/kg to 300 µg/kg
	Rice Idli Mix		Issue. 04, Dated. 20-08-2014	
	Rava Idli Mix	Thiocloprid		10 µg/kg to 300 µg/kg
		Thiometon		10 µg/kg to 300 µg/kg
		Triazophos		10 µg/kg to 300 µg/kg
		Trichlorfon		10 µg/kg to 300 µg/kg
		Tricyclazole		10 µg/kg to 300 µg/kg
		Tridemorph		10 µg/kg to 300 µg/kg
		Malic Hydrazide		10 µg/kg to 300 µg/kg
		Methyl Chloro Phenoxy Acetic Acid (MCPA)		10 µg/kg to 300 µg/kg
		Monocrotophos		10 µg/kg to 300 µg/kg
		Novaluron		10 µg/kg to 300 µg/kg
		Oxadiargyl		10 µg/kg to 300 µg/kg
		Oxadiazon		10 µg/kg to 300 µg/kg
		Demeton – S – Methyl Sulfoxide		10 µg/kg to 300 µg/kg
		Oxyfluorfen		10 µg/kg to 300 µg/kg
		Paraquat Dichloride		10 µg/kg to 300 µg/kg

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	Gulab Jamun Mix	Pendimethalin	CQAL/INST/STP-55 AOAC (2007.01), QuEChERS	10 µg/kg to 300 µg/kg
	Rice Dosa Mix	Phenthoate	Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
	Rice Idli Mix	Phosalone		10 µg/kg to 300 µg/kg
	Rava Idli Mix			
		Phosphamidaon		10 µg/kg to 300 µg/kg
		PirimiPhos – Methyl		10 µg/kg to 300 µg/kg
		α – Hexa Chloro Cyclohexane	CQAL/INST/STP-56 AOAC (2007.01), QuEChERS	10 µg/kg to 300 µg/kg
		β – Hexa Chloro Cyclohexane	Issue. 04, Dated. 20-08-2014	
		γ – Hexa Chloro Cyclohexane		
		δ – Hexa Chloro Cyclohexane	CQAL/INST/STP-56 AOAC (2007.01), QuEChERS	10 µg/kg to 300 µg/kg
		Pyrethrins	Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Heptachlor		10 µg/kg to 300 µg/kg
		Malathion Malaxon		10 µg/kg to 300 µg/kg
		Aldrin		10 µg/kg to 300 µg/kg
		Captafol		10 µg/kg to 300 µg/kg
		Chlordane		10 µg/kg to 300 µg/kg
		Chloropyrifos		10 µg/kg to 300 µg/kg
		Chlorothalonil		10 µg/kg to 300 µg/kg

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	Gulab Jamun Mix	Copper Oxychloride (As Copper)	CQAL/INST/STP-56	10 µg/kg to 300 µg/kg
	Rice Dosa Mix	Cypermethrin	AOAC (2007.01), QuEChERS	10 µg/kg to 300 µg/kg
	Rice Idli Mix		Issue. 04, Dated. 20-08-2014	
	Rava Idli Mix	DDT And Isomers		10 µg/kg to 300 µg/kg
		Decamethrin		10 µg/kg to 300 µg/kg
		Dicofol		10 µg/kg to 300 µg/kg
		Mancozeb As Dithiocarbamate		10 µg/kg to 300 µg/kg
		α – Endosulphan		10 µg/kg to 300 µg/kg
		β – Endosulphan		
		Endosulphan Sulphate		
		Ethofenprox		10 µg/kg to 300 µg/kg
		Fenvalerate		10 µg/kg to 300 µg/kg
		Iprodione		10 µg/kg to 300 µg/kg
		Isoprothiolane		10 µg/kg to 300 µg/kg
		Metiram Isomer As Dithiocarbamate		10 µg/kg to 300 µg/kg
		Parathion		10 µg/kg to 300 µg/kg
		Parathion – Methyl		10 µg/kg to 300 µg/kg
		Paraoxon – Methyl		

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	Gulab Jamun Mix	Phorate	CQAL/INST/STP-56 AOAC (2007.01), QuEChERS	10 µg/kg to 300 µg/kg
	Rice Dosa Mix	Propineb As Dithiocarbamate	Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
	Rice Idli Mix	Hydrogen Cyanide	CQAL/INST/STP-79 Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
	Rava Idli Mix	Hydrogen Phosphide	CQAL/INST/STP-80 Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Inorganic Bromide	CQAL/INST/STP-81 Issue. 04, Dated. 25-11-2015	10 µg/kg to 300 µg/kg
7.	Ready To Eat Meals, Frozen Ready To Eat Meals, Tomato Ketchup, Jams & Marmalades, Halwas, Ginger Masala, Garlic Masala, Red Chilli Masala, Chutneys, Conserves, Dehydrated Vegetables, Dehydrated White Onion	Trace metal elements		
		Lead	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Copper	Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Tin		1.2 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Zinc		1 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Cadmium		0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Nickel		0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
	Toasted Minced, Dehydrated Garlis Minced, Fruit Powders, Mango Pulp,	Arsenic	CQAL/INST/STP-39 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.3 mg/kg

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	Tomato Paste, Parsley, Tomato Powder, Beet Juice Powder, Coconut Milk Powder, Desiccated Coconut Powder	Mercury	CQAL/INST/STP-40 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg
		Benzoic Acid	CQAL/INST/STP-16 Issue. 04, Dated. 20-08-2014	5 mg/kg to 2000 mg/kg LOD: 1 mg/kg
		Sorbic Acid	CQAL/INST/STP-16 Issue. 04, Dated. 20-08-2014	5 mg/kg to 2000 mg/kg LOD: 1 mg/kg
8.	Maida, Wheat Fibre, White Oats, Whole Wheat Atta, Multigrain Atta, Wheat, Soya Flour, Gram Flour, Maize Flour, Oat Flour, Psyllium Husk, Base Noodles, Plain Pasta, Black Gram/ Urad Dal, Red Gram/Toor Dal/ Arhar Dal, Bengal Gram, Horse Gram, Corn Meal, Rice Meal, Gram Meal	Mycotoxins Aflatoxins B1, B2, G1 And G2	CQAL/INST/STP-42 Issue. 03 & 4 Dated. 20-08-2014	2.0 µg/kg to 1000 µg/kg LOD: 0.5 µg/kg
		Trace metal elements Lead	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Tin		1.2 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Cadmium	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Arsenic	CQAL/INST/STP-39 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10: 2012	0.8 mg/kg to 10 mg/kg LOD: 0.3 mg/kg

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	Maida, Wheat Fibre, White Oats, Whole Wheat Atta, Multigrain Atta,	Mercury	CQAL/INST/STP-40 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10: 2012	0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg
	Wheat, Soya Flour, Gram Flour, Maize Flour, Oat Flour, Psyllium Husk,	Pesticides Carbaryl	CQAL/INST/STP-55 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
	Base Noodles, Plain Pasta, Black	Diazinon		10 µg/kg to 300 µg/kg
	Gram/Urad Dal, Red Gram/Toor Dal/Arhar Dal, Bengal Gram, Horse Gram, Corn Meal, Rice Meal, Gram Meal	Dichlorvos		10 µg/kg to 300 µg/kg
		Fenitrothion		10 µg/kg to 300 µg/kg
		Phosphamidon		10 µg/kg to 300 µg/kg
		2, 4 – D		10 µg/kg to 300 µg/kg
		Ethion		10 µg/kg to 300 µg/kg
		MonocrotoPhos		10 µg/kg to 300 µg/kg
		Paraquat Dichloride		10 µg/kg to 300 µg/kg
		Sulfosulfuron		10 µg/kg to 300 µg/kg
		Chlorimuron – Ethyl		10 µg/kg to 300 µg/kg
		Trichlorfon		10 µg/kg to 300 µg/kg
		Thiometon		10 µg/kg to 300 µg/kg
		Carbendazim		10 µg/kg to 300 µg/kg

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	Maida, Wheat Fibre, White Oats, Whole Wheat Atta, Multigrain Atta, Wheat, Soya Flour, Gram Flour, Maize Flour, Oat Flour, Psyllium Husk, Base Noodles, Plain Pasta, Black Gram/Urad Dal, Red Gram/Toor Dal/Arhar Dal, Bengal Gram, Horse Gram, Corn Meal, Rice Meal, Gram Meal	Benomyl Carbofuran Fenthion Phenthoate PirimiPhos – Methyl Bitertanol Methyl Chloro Phenoxy Acetic Acid (MCPA) Tridemorph Propiconazole Isoproturon Tebuconazole Dichlofop – Methyl Pendimethalin Metasulfuron – Methyl Metabenzthiazuron Triallate Fenoxo – Prop – Ethyl	CQAL/INST/STP-55 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg

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	Maida, Wheat Fibre, White Oats, Whole Wheat Atta, Multigrain Atta, Wheat, Soya Flour, Gram Flour, Maize Flour, Oat Flour, Psyllium Husk, Base Noodles, Plain Pasta, Black Gram/Urad Dal, Red Gram/Toor Dal/Arhar Dal, Bengal Gram, Horse Gram, Corn Meal, Rice Meal, Gram Meal	Clodinafop – Propagyl	CQAL/INST/STP-55 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Triadimenol		10 µg/kg to 300 µg/kg
		Aldrin	CQAL/INST/STP-56 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Chlordane		10 µg/kg to 300 µg/kg
		Demeton – S – Methyl Sulfoxide		10 µg/kg to 300 µg/kg
		Trifluralin		10 µg/kg to 300 µg/kg
		Heptachlor	CQAL/INST/STP-56 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		α – Hexa Chloro Cyclohexane	CQAL/INST/STP-79 Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		β – Hexa Chloro Cyclohexane	CQAL/INST/STP-80 Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		γ – Hexa Chloro Cyclohexane	CQAL/INST/STP-81 Issue. 04, Dated. 25-11-2015	10 µg/kg to 300 µg/kg
		δ – Hexa Chloro Cyclohexane		10 µg/kg to 300 µg/kg
		Malathion		10 µg/kg to 300 µg/kg
		Pyrethrins		10 µg/kg to 300 µg/kg
		ChlorfenvinPhos		10 µg/kg to 300 µg/kg
		Chloropyrifos		10 µg/kg to 300 µg/kg
		Cypermethrin		10 µg/kg to 300 µg/kg

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	Maida, Wheat Fibre, White Oats, Whole Wheat Atta, Multigrain Atta, Wheat, Soya Flour, Gram Flour, Maize Flour, Oat Flour, Psyllium Husk, Base Noodles, Plain Pasta, Black Gram/Urad Dal, Red Gram/Toor Dal/Arhar Dal, Bengal Gram, Horse Gram, Corn Meal, Rice Meal, Gram Meal	Decamethrin Dithiocarbamates Phorate Hydrogen Cyanide Hydrogen Phosphide Inorganic Bromide	 CQAL/INST/STP-79 Issue. 04, Dated. 20-08-2014 CQAL/INST/STP-80 Issue. 04, Dated. 20-08-2014 CQAL/INST/STP-79 Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 10 µg/kg to 300 µg/kg 1 µg/kg to 300 µg/kg 5 µg/kg to 300 µg/kg 15 µg/kg to 300 µg/kg
9.	Cocoa Powder, Plain Chocolate Chips, Dark Chocolate, Choco Cream, Choco Covering, Cocoa Butter, Chocolate Paste, Pure Coffee, Coffee-Chicory Powder, White Cream, Coffee	Trace metal elements Lead Tin Cadmium	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg 1.2 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg 0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Extract, Cocoa Liquor, Cocoa Mass, Butterscotch Chips, Inner Filled Chocolate, Ganache Chocolate	Arsenic	CQAL/INST/STP-39, AOAC (19 th Edition) 999.10: 2012, Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.3 mg/kg
		Mercury	CQAL/INST/STP-40, AOAC (19 th Edition) 999.10: 2012, Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg
10.	Pectin Dextrose Monohydrate, Liquid Glucose, Maize Starch, High Maltose Corn Syrup, Maltodextrin, Crystal Gum, Elastigel, Gum Arabic, Rice Starch, Pectin	Trace metal elements		
		Lead	CQAL/INST/STP-38 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10: 2012	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Copper		0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Tin		1.2 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Zinc		1.0 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Cadmium		0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Arsenic	CQAL/INST/STP-39 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10: 2012	0.8 mg/kg to 10 mg/kg LOD: 0.3 mg/kg
		Mercury	CQAL/INST/STP-40 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10 : 2012	0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg

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11.	Caramel, Ponceau-4R, Sunset Yellow, Tartrazine, Erythrosine, Carmoisine, Brilliant Blue, Indigo Carmine, Annatto Powder, Liquid Flavors, Solid Flavor - Menthol	Trace metal elements		
		Lead	CQAL/INST/STP-38 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10: 2012	0.8 µg/kg to 1000 µg/kg LOD: 0.3 µg/kg
		Copper		0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Tin		1.2 mg/kg to 10 mg/kg LOD: 0.6 mg/kg
		Cadmium		0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Zinc		1.0 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Arsenic	CQAL/INST/STP-39 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
12.	Honey	Trace metal elements		
		Lead	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Copper	Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg

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	Honey	Zinc	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.5 mg/kg to 50000 mg/kg LOD: 0.1 mg/kg
		Cadmium	Issue. 04, Dated. 20-08-2014	0.5 mg/kg to 50000 mg/kg LOD: 0.1 mg/kg
		Arsenic	CQAL/INST/STP-39 AOAC (19 th Edition) 999.10: 2012 Issue. 03, Dated. 9-04-2014	0.3 mg/kg to 10 mg/kg LOD: 0.1 mg/kg
		Mercury	CQAL/INST/STP-40 AOAC (19 th Edition) 999.10: 2012 Issue. 03, Dated. 20-08-2014	0.3 mg/kg to 10 mg/kg LOD: 0.1 mg/kg
13.	Chilli Flakes, Nutmeg, Cinnamon, Elaichi/Cardamom, Masala Mix/Curry Paste, Export Sauces, Pasta Saucemaker, Spice Mix, Chilli Whole, Turmeric Whole, Coriander Whole, Chilli Powder, Turmeric Powder, Coriander	Mycotoxins Aflatoxins B1, B2, G1, G2	CQAL/INST/STP-42 Issue. 03, Dated. 20-08-2014	2.0 µg/kg to 1000 µg/kg LOD: 0.5 µg/kg
		Trace metal elements Lead	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 µg/kg to 50000 µg/kg LOD: 0.3 µg/kg
		Copper	Issue. 04, Dated. 20-08-2014	0.8 µg/kg to 50000 µg/kg LOD: 0.6 µg/kg
		Tin		1.2 µg/kg to 50000 µg/kg LOD: 0.6 µg/kg
		Zinc		1.0 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Cadmium		0.8 µg/kg to 50000 µg/kg LOD: 0.3 µg/kg

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	Powder, Blended Spices, Fenugreek Whole, Dehydrated Curry Leaves, Garlic Powder, Compounded Asafetida, Black Pepper Whole, Ginger Powder, Whole Black Mustard, Cumin Whole, Seasoning, Onion Powder, Paprika Oleoresin, Clove Leaf Oil, Cassia Oil, Amchur Powder	Arsenic	CQAL/INST/STP-39 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.3 mg/kg to 10 mg/kg LOD: 0.1 mg/kg
		Mercury	CQAL/INST/STP-40 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.3 mg/kg to 10 mg/kg LOD: 0.1 mg/kg
		Capsaicinoids	CQAL/INST/STP-05 AOAC (19 th Edition) 995.03: 2012 Issue. 04, Dated. 20-08-2014	1000 SHU to 1500000 SHU LOD: 100 SHU
		Pesticides 2, 4 – D	CQAL/INST/STP-55 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Benfuracarb		10 µg/kg to 300 µg/kg
		Benomyl		10 µg/kg to 300 µg/kg
		Carbaryl		10 µg/kg to 300 µg/kg
		Carbendazim		10 µg/kg to 300 µg/kg
		Carbofuran		10 µg/kg to 300 µg/kg
		ChlorfenvinPhos		10 µg/kg to 300 µg/kg
		Diazinon		10 µg/kg to 300 µg/kg
		Dichlorvos		10 µg/kg to 300 µg/kg

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	Chilli Flakes,	Dicofol	CQAL/INST/STP-55	10 µg/kg to 300 µg/kg
	Nutmeg,	Ethion	AOAC (19 th Edition) 2007.01:	10 µg/kg to 300 µg/kg
	Cinnamon,	Fenitrothion	2012, QuEChERS	10 µg/kg to 300 µg/kg
	Elaichi/	Fenthion	Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
	Cardamom,			
	Masala Mix/			
	Curry Paste,			
	Export Sauces,			
	Pasta	Formothion		10 µg/kg to 300 µg/kg
	Saucemaker,			
	Spice Mix, Chilli	Imazethapyr		10 µg/kg to 300 µg/kg
	Whole, Turmeric			
	Whole,	MonocrotoPhos		10 µg/kg to 300 µg/kg
	Coriander			
	Whole, Chilli	Demeton – S – Methyl Sulfoxide		10 µg/kg to 300 µg/kg
	Powder,			
	Turmeric	Oxyfluorfen		10 µg/kg to 300 µg/kg
	Powder,			
	Coriander	Paraquat Dichloride		10 µg/kg to 300 µg/kg
	Powder, Blended			
	Spices,	Phenthoate	CQAL/INST/STP-55	10 µg/kg to 300 µg/kg
	Fenugreek		AOAC (19 th Edition) 2007.01:	
	Whole,	Phosalone	2012, QuEChERS	10 µg/kg to 300 µg/kg
	Dehydrated		Issue. 04, Dated. 20-08-2014	
	Curry Leaves,	Phosphamidon		10 µg/kg to 300 µg/kg
	Garlic Powder,			
	Compounded	PirimiPhos – Methyl		10 µg/kg to 300 µg/kg
	Asafetida, Black			
	Pepper Whole,	QuinalPhos		10 µg/kg to 300 µg/kg
	Ginger Powder,			
	Whole Black	Thiometon	CQAL/INST/STP-56	10 µg/kg to 300 µg/kg
	Mustard, Cumin		AOAC (19 th Edition) 2007.01:	
	Whole,	TriazoPhos	2012, QuEChERS	10 µg/kg to 300 µg/kg
	Seasoning,		Issue. 04, Dated. 20-08-2014	

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	Onion Powder, Paprika Oleoresin, Clove Leaf Oil, Cassia Oil, Amchur Powder	TrichlorPhon	CQAL/INST/STP-56 AOAC (19 th Edition) 2007.01: 2012, QuEChERS Issue. 04, Dated. 20-08-2014	10 µg/kg to 300 µg/kg
		Aldrin		10 µg/kg to 300 µg/kg
		Chlordane		10 µg/kg to 300 µg/kg
		Chlorpyrifos		10 µg/kg to 300 µg/kg
		Copper Oxychloride		10 µg/kg to 300 µg/kg
		Cypermethrin		10 µg/kg to 300 µg/kg
		DDT		10 µg/kg to 300 µg/kg
		Decamethrin		10 µg/kg to 300 µg/kg
		Dithiocarbamates		10 µg/kg to 300 µg/kg
		α – Endosulphan		10 µg/kg to 300 µg/kg
		β – Endosulphan		
		Endosulphan Sulphate		
		Heptachlor		10 µg/kg to 300 µg/kg
		α – Hexa Chloro Cyclohexane β – Hexa Chloro Cyclohexane γ – Hexa Chloro Cyclohexane δ – Hexa Chloro Cyclohexane		10 µg/kg to 300 µg/kg

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	Chilli Flakes,	Iprodione	CQAL/INST/STP-56	10 µg/kg to 300 µg/kg
	Nutmeg,		AOAC (19 th Edition) 2007.01:	
	Cinnamon,	Malathion	2012, QuEChERS	10 µg/kg to 300 µg/kg
	Elaichi/		Issue. 04, Dated. 20-08-2014	
	Cardamom,	Mancozeb as Dithiocarbamate	CQAL/INST/STP-79	10 µg/kg to 300 µg/kg
	Masala Mix/		Issue. 04, Dated. 20-08-2014	
	Curry Paste,	Metiram As Dithiocarbamate	CQAL/INST/STP-80	10 µg/kg to 300 µg/kg
	Export Sauces,		Issue. 04, Dated. 20-08-2014	
	Pasta	Parathion	CQAL/INST/STP-81	10 µg/kg to 300 µg/kg
	Sauce-maker,		Issue. 04, Dated. 25-11-2015	
	Spice Mix, Chilli	Parathion – Methyl		10 µg/kg to 300 µg/kg
	Whole, Turmeric			
	Whole,	Phorate		10 µg/kg to 300 µg/kg
	Coriander			
	Whole, Chilli	Pyrethrins		10 µg/kg to 300 µg/kg
	Powder,			
	Turmeric	Hydrogen Cyanide	CQAL/INST/STP-79	1 µg/kg to 300 µg/kg
	Powder,		Issue. 04, Dated. 20-08-2014	
	Coriander			
	Powder, Blended	Hydrogen Phosphide	CQAL/INST/STP-80	5 µg/kg to 300 µg/kg
	Spices,		Issue. 04, Dated. 20-08-2014	
	Fenugreek			
	Whole,	Inorganic Bromide	CQAL/INST/STP-79	10 µg/kg to 300 µg/kg
	Dehydrated		Issue. 04, Dated. 20-08-2014	
	Curry Leaves,			
	Garlic Powder,			
	Compounded			
	Asafetida, Black			
	Pepper Whole,			
	Ginger Powder,			
	Whole Black			
	Mustard, Cumin			
	Whole,			
	Seasoning,			

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Onion Powder, Paprika Oleoresin, Clove Leaf Oil, Cassia Oil, Amchur Powder			
14.	Refined Sugar, Plantation White Sugar	Lead	CQAL/INST/STP-38 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10: 2012	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Copper		0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Tin		1.2 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Zinc		1.0 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Cadmium		0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Arsenic	CQAL/INST/STP-39 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10: 2012	0.8 mg/kg to 10 mg/kg LOD: 0.3 mg/kg
		Mercury	CQAL/INST/STP-40 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10: 2012	0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
15.	Cashew, Almond, Raisins	Mycotoxins	CQAL/INST/STP-42 Issue. 04, Dated. 20-08-2014	2.0 µg/kg to 1000 µg/kg LOD: 0.5 µg/kg
		Trace metal elements		
		Lead	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Copper	Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Tin		1.2 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Zinc		1.0 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Cadmium		0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Arsenic	CQAL/INST/STP-39 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.3 mg/kg
		Mercury	CQAL/INST/STP-40 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
16.	Orange Juice Powder, Strawberry Juice Powder, Jamun Juice, Orange Juice, Pineapple Juice, Pink Guava Juice, Apple Juice, Mixed Fruit Juice, Mango Juice, Amla Juice, Pomogranate Juice, Cranberry Juice, Dry Fruit Apple Juice, Orange Cells, Pomogranate Pulp, Jamun Pulp, Amla Pulp, Litchi Pulp, Mixed Fruit Concentrate, Pink Guava Pulp, Totapuri Mango Pulp, Alphanso Mango Pulp, Pineapple Juice Concentrate, Apple Juice Concentrate, Deionised Apple	Trace metal elements Lead Copper Tin Zinc Cadmium Arsenic Mercury	CQAL/INST/STP-38 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10: 2012 CQAL/INST/STP-39 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10: 2012 CQAL/INST/STP-40 Issue. 04, Dated. 20-08-2014 AOAC (19 th Edition) 999.10: 2012	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg 0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg 0.5 mg/kg to 50000 mg/kg LOD: 0.1 mg/kg 1.0 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg 0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg 0.8 mg/kg to 10 mg/kg LOD: 0.3 mg/kg 0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Juice Concentrate, Orange Juice Concentrate			
17.	Hydrogenated Vegetable Oil, Bakery Shortening, Palm Oil, Palmolein Oil, Hydrogenated Coconut Oil (HCNO), Special Hydrogenated Vegetable Oil, Hydrogenated Palm Kernel Oil (HPKO), Carnauba Wax, Poly Glycerol Poly Ricinoleate (PGPR), Miglyol 812N	Trace metal elements Lead Copper Tin Zinc Cadmium Arsenic Mercury Hypercine	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014 CQAL/INST/STP-39 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014 CQAL/INST/STP-40 AOAC (19 th Edition) 999.10 : 2012 Issue. 04, Dated. 20-08-2014 CQAL/INST/STP-45 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg 0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg 1.2 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg 1.0 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg 0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg 0.8 mg/kg to 10 mg/kg LOD: 0.3 mg/kg 0.8 mg/kg to 10 mg/kg LOD: 0.6 mg/kg 10 µg/kg to 300 µg/kg

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
18.	Dehydrated Chicken, Non-Veg Ready Meals, Chicken Fat	Trace metal elements		
		Lead	CQAL/INST/STP-38 AOAC (19 th Edition) 999.10 : 2012	0.8 mg/kg to 50000 mg/kg LOD: 0.3 mg/kg
		Copper	Issue. 04, Dated. 20-08-2014	0.8 mg/kg to 50000 mg/kg LOD: 0.6 mg/kg
		Tin		0.5 mg/kg to 50000 mg/kg LOD: 0.1 mg/kg
		Zinc		0.5 mg/kg to 50000 mg/kg LOD: 0.1 mg/kg
		Cadmium	CQAL/INST/STP-39 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.5 mg/kg to 50000 mg/kg LOD: 0.1 mg/kg
		Arsenic		0.3 mg/kg to 10 mg/kg LOD: 0.3 mg/kg
III.	WATER	Mercury	CQAL/INST/STP-40 AOAC (19 th Edition) 999.10: 2012 Issue. 04, Dated. 20-08-2014	0.3 mg/kg to 10 mg/kg LOD: 0.1 mg/kg
1.	Reverse Osmosis Water, Raw Water	Colour	IS 3025 (Part 4): 1983	1 Hazen to 100 Hazen units
		Odour	IS 3025 (Part 4): 1983	Qualitative
		pH Value	IS 3025 (Part 11): 1983	1 to 14
		Taste	IS 3025 (Part 7): 1984 IS 3025 (Part 8): 1984	Qualitative

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Reverse Osmosis Water, Raw Water	Turbidity	IS 3025 (Part 10): 1984	1 NTU to 80 NTU
		Total Dissolved Solids	IS 3025 (Part 16): 1984	1 mg/l to 500 mg/l; 500 mg/l to 2000 mg/l
		Ammonia (As Total Ammonia Nitrogen)	IS 3025 (Part 34): 1988	0.5 mg/l to 10 mg/l
		Anionic Detergents (As MBAS)	IS 13428: 2005 APHA (22 nd Edition) 5540C,	0.2 mg/l to 10 mg/l
		Chloramines (As Cl ₂)	IS 3025 (Part 26): 1986 APHA (22 nd Edition) 4500,	1 mg/l to 10 mg/l
		Chloride (As Cl)	IS 3025 (Part 32): 1988 APHA (22 nd Edition) 4500,	1 mg/l to 1000 mg/l
		Fluoride (As F)	IS 3025 (Part 60): 2008 APHA (22 nd Edition) 4500FD,	1 mg/l to 10 mg/l
		Free Residual Chlorine	IS 3025 (Part 26): 1986	0.1 mg/l to 2 mg/l
		Calcium (As Ca)	IS 3025 (Part 40): 1991	1 mg/l to 200 mg/l
		Magnesium (As Mg)	IS 3025 (Part 46): 1991	1 mg/l to 200 mg/l
		Nitrates (As NO ₃)	IS 3025 (Part 34): 1998, APHA (22 nd Edition) 4500 NO ³⁻ B,	1 mg/l to 100 mg/l
		Phenolic Compounds (As C ₆ H ₅ OH)	IS 3025 (Part 43): 1992, APHA (22 nd Edition) 5530C	0.01 mg/l to 100 mg/l

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	Reverse Osmosis Water, Raw Water	Cyanide	IS 3025 (Part 27): 1986, APHA (22 nd Edition) 4500	0.05 mg/l to 10 mg/l
		Sulphates (As SO ₄)	IS 3025 (Part 24): 1986	1 mg/l to 400 mg/l
		Sulphide (As H ₂ S)	IS 3025 (Part 29): 1986	0.05 mg/l to 100 mg/l
		Total Alkalinity (As Caco ₃)	IS 3025 (Part 23): 1936	1 mg/l to 600 mg/l
		Total Hardness	IS 3025 (Part 21): 2009	2 mg/l to 700 mg/l
-X-X-X-X-X-X-X-X-X-X-X-X-				